SOUTHERN PACIFIC COMPANY

PACIFIC LINES

TIME TABLE

FOR THE

TUCSON DIVISION

114

To Take Effect Sunday, November 22, 1942, at 12:01 A. M.

MOUNTAIN STANDARD TIME

For the government and information of employes only.

C. F. DONNATIN,
General Manager

J. W. CORBETT,
Assistant General Manager

R. E. HALLAWELL,
General Superintendent of Transportation

G. C. BAKER,
Superintendent of Transportation

H. R. HUGHES,
Superintendent

WELLTON SUBDIVISION

	EASTWARD											WESTWARD					
Capacity of sidings in car lengths	SECOND CLASS				FIRST CLASS				Distance from San Francisco	Time Table No. 114 November 22, 1942	Distance from Phoenix Yard	FIRST CLASS				SECOND CLASS	THIRD CLASS
	846 Freight	902 Freight	844 Freight	842 Freight	2 Sunset Limited	4 Golden State Limited	6 Argonaut	44 Californian				1 Sunset Limited	3 Golden State Limited	43 Californian	5 Argonaut	841 Freight	901 Freight
	Leave Daily	Leave Daily	Leave Daily	Leave Daily	Leave Daily	Leave Daily	Leave Daily	Leave Daily		STATIONS		Arrive Daily	Arrive Daily	Arrive Daily	Arrive Daily	Arrive Daily	Arrive Daily
Yuma Yd. BKWOTYP	4.50 PM	1.30 PM	8.20 AM	1.15 AM	5.40 PM	5.40 AM	4.15 AM	1.35 AM	732.7	TO-R YUMA D.T. E. 3.1 — W. 4.8	174.2	s 11.00 AM	s 3.35 PM	s 3.20 AM	s 4.00 AM	1.40 AM	11.45 PM
P	5.05	1.45	8.35	1.30	5.51	5.51	4.26	1.46	737.4 737.5	TO EAST YARD E. 3.8 — W. 2.8	169.5	10.50	3.25	3.10	3.50	1.27	11.32
62 P	5.10	1.50	8.40	1.35	5.55	5.56	4.31	1.51	740.1	ARABY E. 3.7 — W. 3.9	166.9	10.45	3.21	3.05	3.45	1.22	11.27
70 P	5.16	1.56	8.46	1.41	6.00	6.01	4.36	1.56	743.7	FORTUNA E. 2.8 — W. 2.5	163.3	10.40	3.16	3.00	3.40	1.16	11.21
62 P	5.21	2.01	8.51	1.46	6.03	6.05	4.40	2.00	746.6	TO BLAISDELL E. 7.1 — W. 7.3	160.4	10.35	3.12	2.55	3.35	1.11	11.16
M 81 P	5.34	2.14	9.04	1.59	6.15	6.18	f 4.53	2.13	753.5	TO DOME D.T. E. 6.9 — W. 6.1	153.5	10.22	3.00	f 2.42	3.22	12.58	11.03
10 Spur P									760.2	LIGURTA E. 9.2 — W. 10.5	146.8						
68 WIP	6.05 PM	2.55	9.35 AM	2.30 AM	f 6.37	6.40	s 5.15 AM	2.35	770.0	TO WELLTON E. 5.9 — W. 5.4	137.0	10.00 AM	2.40	2.20	f 3.00	12.30 AM	10.35
72 P		3.07			6.46	6.49		**2.47**	775.7	MING E. 5.2 — W. 5.3	131.3		2.32	2.10	**2.47**		10.20
73 P		3.17			6.54	6.57		2.55	780.9	ROLL E. 7.7 — W. 6.9	126.1		2.25	2.02	f 2.37		10.05
31 Spur P									788.3	TYSON E. 4.4 — W. 5.2	118.7						
73 P		3.37			7.07	7.10		3.08	793.2	GROWLER E. 9.4 — W. 9.4	113.8		2.12	1.49	2.24		9.45
76 P		3.55			7.17	7.20		3.18	802.5	KOFA E. 10.2 — W. 10.2	104.5		2.02	1.39	2.14		9.31
73 P		4.15			7.28	7.31		3.29	812.7	HORN E. 9.7 — W. 9.7	94.3		1.51	1.28	2.03		9.13
75 WOP		4.40			f 7.43	7.46		3.44	822.3	TO HYDER E. 8.8 — W. 8.8	84.7		f 1.41	1.18	f 1.53		8.55
73 P		5.00			7.55	7.58		3.56	831.1	A.B.S. MONTEZUMA E. 9.9 — W. 9.9	75.9		1.28	1.05	1.38		8.32
76 WP		5.20			**8.06**	8.09		4.07	841.1	SADDLE E. 9.9 — W. 9.9	65.9		1.17	12.54	1.27		**8.06**
72 P		6.15			8.21	8.24		4.22	851.0	GILLESPIE E. 5.3 — W. 4.6	56.0		1.05	12.42	1.15		7.40
39 Spur P									856.0	CRAG E. 4.8 — W. 5.6	51.0						
76 P		6.35			8.32	8.35		4.33	861.3	ARLINGTON E. 4.5 — W. 4.5	45.7		12.54	12.31	1.04		7.15
72 P		**6.50**			8.37	8.40		4.38	865.7	DIXIE E. 5.4 — W. 5.5	41.3		12.49	12.26	12.58		**6.50**
72 P		7.00			8.43	8.46		4.44	871.5	CONGER E. 4.4 — W. 4.4	35.5		12.43	12.20	12.51		6.38
76 WP		7.10			f 8.51	8.57		4.53	875.7	TO BUCKEYE E. 6.6 — W. 6.6	31.3		f 12.35	12.12 AM	s 12.43		6.30
72 P		7.22			8.59	9.05		5.01	881.7	LIBERTY E. 8.2 — W. 8.2	25.3		12.26	11.59 PM	12.29		6.18
74 YP		7.38			f 9.11	9.18		5.14	889.7	LITCHFIELD E. 3.1 — W. 3.3	17.3		f 12.16	11.47	f 12.17		6.02
100 P		7.46			9.16	9.25		5.21	893.0	CASHION E. 2.2 — W. 2.9	14.0		12.10	11.37	f 12.07 AM		5.54
P									895.7	TOLLESON E. 2.7 — W. 2.1	11.3		f				
73 P		7.57			9.24	9.33		5.29	898.1	FOWLER E. 4.3 — W. 3.8	8.9		12.03 PM	11.26	11.56 PM		5.43
Phoenix Yard P									902.0	CAMPO E. 2.0 — W. 2.0	5.0						
75 P		8.10			9.32	9.41		5.37	904.0	23rd AVE. PHOENIX E. 1.5 — W. 1.5	3.0		11.57 AM	11.18	11.48		5.30
									905.5	CROSSING-AT&SF WYE E. 0.5 — W. 0.5	1.5						
BKWP					s 9.40 PM	s 9.50 AM		s 5.45 AM	906.0	R PHOENIX D.T. E. 1.0 — W. 1.0	1.0		11.50 AM	11.10 PM	11.40 PM		
BKWOTYP		8.20 PM							907.0	TO-R PHOENIX YARD	0.0						5.20 PM
	Arrive Daily	Arrive Daily	Arrive Daily	Arrive Daily	Arrive Daily	Arrive Daily	Arrive Daily	Arrive Daily		(174.2)		Leave Daily	Leave Daily	Leave Daily	Leave Daily	Leave Daily	Leave Daily
	(1.15) 29.84	(6.50) 25.49	(1.15) 29.84	(1.15) 29.84	(4.00) 43.30	(4.10) 41.57	(1.00) 37.30	(4.10) 41.57		Time over District Average Speed per Hour		(1.00) 37.30	(3.45) 46.21	(4.10) 41.57	(4.20) 39.97	(1.10) 31.97	(6.25) 27.16

ADDITIONAL FLAG STOPS TO RECEIVE OR DISCHARGE PASSENGERS

Train	At	Receive or Discharge	To (or beyond)	From (or beyond)
44	Hyder, Buckeye, Litchfield	Receive	Phoenix	
4	Hyder, Buckeye, Litchfield	Receive	East of El Paso	

ADDITIONAL STATIONS

Granite Spur	MP 755.2
Hassayampa	MP 867.6
Palo Verde	MP 870.2
Norton	MP 884.9

ADDITIONAL FLAG STOPS TO RECEIVE OR DISCHARGE PASSENGERS

Train	At	Receive or Discharge	To (or beyond)	From (or beyond)
43	Litchfield, Buckeye, Hyder	Discharge Revenue		East of El Paso
43	Litchfield, Buckeye	Receive Revenue	San Diego	
43	Litchfield	Receive	Colton	

PICACHO SUBDIVISION

Time Table No. 114

November 22, 1942

EASTWARD — WESTWARD

Capacity of sidings in car lengths	SECOND CLASS				FIRST CLASS				Distance from San Francisco	STATIONS	Distance from Tucson	FIRST CLASS				SECOND CLASS	THIRD CLASS
	904 Freight	**856** Freight	**854** Freight	**852** Freight	**2** Sunset Limited	**4** Golden State Limited	**6** Argonaut	**44** Californian				**1** Sunset Limited	**3** Golden State Limited	**43** Californian	**5** Argonaut	**843** Freight	**903** Freight
	Leave Daily	Leave Daily	Leave Daily	Leave Daily	Leave Daily	Leave Daily	Leave Daily	Leave Daily				Arrive Daily	Arrive Daily	Arrive Daily	Arrive Daily	Arrive Daily	Arrive Daily
Phoenix Yard BKWP					10.05PM	10.10AM		6.15AM	906.0	R PHOENIX D.T. E. 1.0 — W. 1.0	120.9		s 11.30AM	s 10.45PM	s 11.15PM		
Phoenix Yard BKWO TYP	8.30PM				10.10	10.15		6.20	907.0	TO-R PHOENIX YARD E. 4.0 — W. 4.0	119.9		11.25	10.40	11.10		11.55PM
20 Spur P	8.42				10.17	10.22		6.27	911.1	KENDALL E. 0.8 — W. 0.4	115.8		11.17	10.32	11.02		11.40
19 Spur P									911.8	TOVREA E. 2.5 — W. 3.3	115.1						
79 YP	8.52				f **10.24**	f 10.29		6.34	914.4	TO TEMPE E. 1.0 — W. 0.1	112.5		f 11.11	s **10.24**	s 10.55		11.25
P									915.3	TEMPE JCT. E. 0.9 — W. 1.9	111.6						
P	9.02				10.30	10.35		6.40	917.1	NORMAL JCT. E. 4.8 — W. 4.6	109.8		11.03	10.10	10.46		11.10
Yard Limits 75 WYP	9.20				s **10.37** **10.42**	s **10.50**		6.52	921.8	TO MESA E. 2.0 — W. 2.1	105.1		s **10.50**	s 10.02	s **10.37**		**10.45** **10.15**
81 P	9.27				10.46	10.54		6.56	923.6	McQUEEN E. 0.3 — W. 1.5	103.3		10.44	9.52	10.27		10.03
22 P									925.4	TREMAINE E. 0.8 — W. 0.9	101.5						
40 P	9.32				10.51	10.59		7.01	926.1	FALFA E. 3.1 — W. 3.5	100.8		10.39	9.48	10.23		9.51
80 P	**9.43**				s 11.00	s 11.10		7.10	929.3	TO CHANDLER E. 1.9 — W. 1.1	97.6		f 10.33	**9.43**	s 10.18		**9.43**
43 Spur P									931.0	POZO E. 3.1 — W. 3.9	95.9						
76 P	9.52				11.07	11.17		7.17	934.3	SERAPE E. 3.5 — W. 4.4	92.6		10.24	9.34	10.09		9.17
67 P	**10.04**				11.13	11.23		7.22	939.0	SANTAN E. 4.3 — W. 4.3	87.9		10.18	9.29	**10.04**		9.09
67 P	10.16				11.19	11.29		7.27	943.2	DOCK E. 5.2 — W. 4.5	83.7		10.12	9.24	9.59		9.02
14 Spur P									948.1	OLBERG E. 4.7 — W. 5.5	78.8						
75 P	10.33				11.30	11.40		7.38	953.2	BLACKWATER E. 5.0 — W. 5.4	73.7		10.01	9.13	9.48		8.46
118 YP	10.43				11.35	11.45		7.43	958.2	POSTON E. 3.7 — W. 3.3	68.7		9.55	9.07	9.42		8.38
73 WP	11.03				s 11.45	s 11.57AM		7.53	962.0	A.B.S. TO COOLIDGE E. 4.6 — W. 4.2	64.9		s 9.50	9.02	s 9.37		8.30
32 P									966.4	RANDOLPH E. 4.8 — W. 5.1	60.5				f		
67 P	11.21				11.57PM	12.09PM		8.05	971.4	TOPAZ E. 3.6 — W. 2.9	55.5		9.38	8.46	9.21		8.11
P									975.2	PEAK E. 4.7 — W. 5.3	51.7						
N94 S89 WOIYP	11.40	7.40PM	11.25AM	3.25AM	12.09AM	12.22	10.05AM	8.17	979.7 936.7	TO PICACHO E. 3.7 — W. 3.5	47.2	5.45AM	9.27	8.35	f 9.10	4.30PM	7.57
72 P	11.52PM	**7.50**	11.35	3.35	12.16	12.29	10.12	8.24	940.7	OCATILLA E. 3.3 — W. 3.4	43.2	5.38	9.20	8.28	9.03	4.23	**7.50**
90 P	12.02AM	7.59	11.44	3.44	12.20	12.33	10.18	8.28	944.2	TO WYMOLA E. 3.8 — W. 3.6	39.7	5.34	9.16	8.24	8.59	4.17	7.43
71 P	12.11	8.07	11.51	3.51	12.24	12.37	10.24	8.32	947.9	MONTROSE E. 3.3 — W. 3.8	36.0	5.30	9.12	8.20	8.55	4.11	7.36
W78 E78 WP	12.20	**8.16**	11.58AM	3.58	12.29	12.42	10.32	8.36	951.4	TO RED ROCK E. 3.2 — W. 2.7	32.5	5.26	9.08	**8.16**	8.51	4.05	7.30
67 P	12.25	8.25	12.03PM	4.03	12.32	12.45	10.37	8.39	954.3	AVRA E. 3.0 — W. 3.8	29.6	5.23	9.04	8.12	8.46	4.00	7.25
78 P	**12.37**	**8.40**	12.10	4.10	**12.37**	12.51	f 10.46	8.46	958.4	TO NAVISKA E. 4.9 — W. 4.1	25.5	5.17	8.58	8.06	f **8.40**	3.53	7.18
69 P	12.48	8.48	12.16	4.16	12.42	12.56	10.53	**8.52**	962.2	MARANA E. 2.1 — W. 2.4	21.7	5.12	**8.52**	7.59	8.34	3.47	7.12
94 P	12.54	8.53	12.21	4.21	12.45	12.59	10.57	8.56	964.6	ROSKRUGE E. 2.6 — W. 2.4	19.3	5.09	8.45	7.54	8.29	3.43	7.08
164 WP	1.00	8.58	12.26	4.26	12.48	1.02	11.02	8.59	966.9	TO RILLITO E. 2.7 — W. 3.0	17.0	5.06	8.42	7.51	8.26	3.39	7.04
93 P	1.08	9.04	12.32	4.32	12.52	1.06	11.07	9.02	969.9	SABINO E. 2.2 — W. 2.1	14.0	5.02	8.37	7.47	8.21	3.34	6.59
78 P	1.14	9.09	12.37	4.37	12.56	1.10	11.13	9.06	972.1	TO CORTARO E. 2.6 — W. 2.7	11.8	4.59	8.34	7.44	8.18	3.30	6.55
93 P	1.20	9.14	12.42	4.42	12.59	1.13	11.17	9.09	974.7	KINO E. 2.7 — W. 3.5	9.2	4.55	8.31	7.41	8.14	3.26	6.51
W78 E78 P	1.26	9.19	12.47	**4.52**	1.03	1.17	11.22	9.13	977.4	JAYNES E. 4.0 — W. 2.3 D.T.	6.5	**4.52**	8.27	7.37	8.11	3.21	6.46
P	1.32	9.25	12.53	4.58	1.07	1.22	11.27	9.17	981.2	TO STOCKHAM E. 2.9 — W. 2.9	2.7	4.47	8.22	7.32	8.07	3.14	6.39
Tucson Yard BKWFITYP	1.45AM	9.35PM	1.05PM	5.10AM	s 1.15AM	s 1.30PM	s 11.35AM	s 9.25AM	983.9	TO-R TUCSON	0.0	4.40AM	8.15AM	7.25PM	8.00PM	3.05PM	6.30PM
	Arrive Daily	Arrive Daily	Arrive Daily	Arrive Daily	Arrive Daily	Arrive Daily	Arrive Daily	Arrive Daily		(120.9)		Leave Daily	Leave Daily	Leave Daily	Leave Daily	Leave Daily	Leave Daily
	(5.15) 22.84	(1.55) 24.63	(1.40) 28.32	(1.45) 26.97	(3.10) 38.18	(3.20) 36.27	(1.30) 31.47	(3.10) 38 .18		Time over District Average Speed per Hour		(1.05) 43.57	(3.15) 37.20	(3.20) 36.27	3.15) 37.20	(1.25) 33.32	(5.25) 22.13

RULE 5. At Picacho schedule time and train orders apply at junction switch.

RULE S-72. Westward trains are superior to trains of the same class in the opposite direction, except Nos. 4 and 44 are superior to No. 1.

RULE 206 (A). Unless otherwise instructed, crews arriving Phoenix on eastward first-class trains, will assume same schedule at Phoenix and proceed to Phoenix Yard without clearance.

RULE 221. Trains terminating at Phoenix need not obtain clearance at Phoenix Yard.

Second main track between east end Phoenix Yard and east switch Kendall, may be used by freight trains when authorized by train order. Single track rules apply.

No. 44 reduce speed sufficiently, stopping if necessary to permit exchange of first class and working mail at Tempe, Mesa, Chandler and Coolidge.

ADDITIONAL FLAG STOPS TO RECEIVE OR DISCHARGE PASSENGERS

Train	At	Receive or Discharge	To (or Beyond)	From (or beyond)
44	Tempe, Mesa, Chandler, Coolidge, Naviska	Receive	Benson	
44	Red Rock	Discharge Revenue		Phoenix
6	Red Rock, Marana, Rillito, Cortaro	Receive, Discharge	El Paso	Colton
6	Red Rock (Saturday)	Receive Non-Revenue	Tucson	

ADDITIONAL FLAG STOPS TO RECEIVE OR DISCHARGE PASSENGERS

Train	At	Receive or Discharge	To (or Beyond)	From (or beyond)
43	Coolidge, Chandler	Receive, Discharge Rev.	San Diego	East of El Paso
5	Cortaro, Rillito, Marana	Receive, Discharge Rev..	Colton	El Paso
5	Red Rock	Receive, Discharge Rev	Phoenix	El Paso
5	Red Rock (Saturday)	Discharge Non-Rev enue		Tucson
3	Naviska	Discharge Revenue		East of El Paso

WELLTON SUBDIVISION

Capacity of sidings in car lengths	EASTWARD SECOND CLASS 846 Freight	844 Freight	842 Freight	FIRST CLASS 6 Argonaut	Distance from San Francisco		Time Table No. 114 November 22, 1942 STATIONS		Distance from Gila	WESTWARD FIRST CLASS 1 Sunset Limited	SECOND CLASS 841 Freight
	Leave Daily	Leave Daily	Leave Daily	Leave Daily						Arrive Daily	Arrive Daily
68 WIP	6.05PM	9.35AM	2.30AM	5.15AM	770.0	TO	WELLTON E. 3.4 — W. 3.4	D.T.	85.7	f 10.00AM	12.30AM
69 P	6.13	9.43	2.38	5.22	773.1		ASHER E. 3.3 — W. 3.3		82.6	9.54	12.22
63 P	6.19	9.49	2.44	f 5.27	776.4		TACNA E. 3.6 — W. 3.6		79.3	f 9.49	12.16
69 P	6.25	9.56	2.50	5.32	780.1		GAEL E. 4.0 — W. 3.9		75.6	9.44	12.09
63 P	6.31	10.02	2.56	5.37	783.8		COLFRED E. 4.5 — W. 4.5		71.9	9.39	12.02AM
67 P	6.39	10.10	3.04	5.44	788.6		PEMBROKE E. 4.1 — W. 4.2		67.1	9.33	11.54PM
W79 E67 P	6.50	10.20	3.15	f 5.52	792.6	TO	MOHAWK E. 3.3 — W. 3.1		63.1	f 9.28	11.47
63 P	6.56	10.26	3.21	5.57	795.9		KIM E. 2.6 — W. 4.6		59.8	9.20	11.37
64 P	7.04	10.34	3.29	6.03	800.5		STOVAL E. 5.7 — W. 6.0		55.2	9.14	11.29
94 P	7.14	10.44	3.39	f 6.10	806.2		MUSINA E. 5.6 — W. 5.4		49.5	f 9.07	11.20
63 WP	7.24	10.54	3.49	f 6.20	811.9	A. B. S. TO	AZTEC E. 3.8 — W. 4.1		43.8	f 8.59	11.09
94 P	7.30	11.00	3.55	6.25	815.8		MUGGINS E. 4.0 — W. 3.8		39.9	8.53	10.54
63 P	7.37	11.07	4.02	6.29	819.7		STANWIX E. 2.2 — W. 2.3		36.0	8.49	10.47
68 P	7.41	11.11	4.06	6.32	822.0		LAVA E. 3.8 — W. 4.6		33.7	8.46	10.43
W76 E72 WOP	8.05	11.35	4.30	f 6.45	826.1	TO	SENTINEL E. 3.7 — W. 3.0		29.6	s 8.40	10.35
76 P	8.15	11.45	4.40	6.51	829.6		TRIGO E. 3.7 — W. 3.6		26.1	8.30	10.29
61 P	8.22	11.52AM	4.47	6.56	833.1		TARTON E. 6.0 — W. 6.0		22.6	8.26	10.23
65 P	8.33	12.03PM	4.58	7.06	839.9		PIEDRA E. 5.4 — W. 5.4		15.8	8.17	10.12
64 P	8.42	12.12	5.07	f 7.14	845.5		THEBA E. 4.7 — W. 4.7		10.2	f 8.10	10.03
63 P	8.50	12.20	5.15	7.21	850.3		SMURR E. 3.0 — W. 5.1		5.4	8.04	9.55
Yard Limits BKWOTYP	9.00PM	12.30PM	5.25AM	s 7.30AM	855.7	TO-R	GILA		0.0	7.55AM	9.45PM
	Arrive Daily	Arrive Daily	Arrive Daily	Arrive Daily			(85.7)			Leave Daily	Leave Daily
	(2.55) 29.38	(2.55) 29.38	(2.55) 29.38	(2.15) 38.09			Time over District Average Speed per Hour			(2.05) 41.14	(2.45) 31.16

WELLTON SUBDIVISION

Capacity of sidings in car lengths	EAST-WARD	Distance from San Francisco	Time Table No. 114 November 22, 1942 Litchfield Branch STATIONS	Distance from Litchfield Park	WEST-WARD
74 YP		889.7	LITCHFIELD 5.0	5.0	
30) 16} Spurs 17)		894.7	LITCHFIELD PARK	0.0	
			(5.0)		

RULE 5. At Gila schedule time and train orders for first class trains apply at passenger station.

YUMA VALLEY RAILROAD

Capacity of sidings in car lengths	EAST-WARD	Distance from Yuma		Time Table No. 114 November 22, 1942 STATIONS	Distance from Gadsden	WEST-WARD
Yuma Yard P		0.0	R	YUMA 1.0	21.0	
20		1.0		U.S.R.S. 2.0	20.0	
25 Spur		3.0		LUDY 5.5	18.0	
23		8.5		WILLETTS 1.7	12.5	
8 Spur		10.2		SPILLWAY 4.8	10.8	
25		15.0		SOMERTON 6.0	6.0	
		21.0		GADSDEN	0.0	
				(21.0)		

SPECIAL INSTRUCTIONS

Southern Pacific Company Rules and Regulations of the Transportation Department, Air Brake Rules, and Special Instructions in Tucson Division Time Table govern on Yuma Valley Railroad.

Trains will not exceed speed 15 MPH except must not exceed 8 MPH over trestle at U.S.R.S.

Impaired side clearance at Spillway Spur, MP 10.25.

At Yuma, normal position of junction switch will be for S.P. yard tracks.

RULE 93: Yard limits are established at Yuma.

U.S.R.S. yard, Yuma, and Ludy siding must not be used.

Track out service and must not be used east of MP 16 (Somerton).

PICACHO SUBDIVISION

Capacity of sidings in car lengths	EASTWARD SECOND CLASS			FIRST CLASS	Distance from San Francisco	A. B. S.	Time Table No. 114 November 22, 1942 STATIONS	Distance from Picacho	WESTWARD FIRST CLASS	SECOND CLASS
	856 Freight	854 Freight	852 Freight	6 Argonaut					1 Sunset Limited	843 Freight
	Leave Daily	Leave Daily	Leave Daily	Leave Daily					Arrive Daily	Arrive Daily
Yard Limits BKWOTYP	4.30PM	8.20AM	12.20AM	**7.45**AM	855.7	TO-R	GILA E. 3.0 — W. 3.8	81.0	s **7.45**AM	7.15PM
62 P	4.39	8.29	12.29	7.52	859.1		COLEDON E. 6.2 — W. 6.2	77.6	7.38	7.05
74 P	4.55	8.45	12.45	8.03	865.1		BOSQUE E. 3.9 — W. 3.8	71.6	7.30	6.54
62 P	5.07	8.57	12.57	8.10	869.1		OCAPOS E. 2.6 — W. 2.7	67.6	7.24	6.46
73 P	5.17	9.07	1.07	8.15	871.8		SHAWMUT E. 3.0 — W. 3.0	64.9	7.20	6.41
72 YP	5.30	9.20	1.20	f 8.21	874.6	TO	ESTRELLA E. 4.8 — W. 4.7	62.1	f 7.16	6.36
64 P	5.39	9.29	1.29	8.27	879.4		BUCHAN E. 4.0 — W. 4.0	57.3	7.09	6.27
63 P	5.47	9.37	1.37	f 8.34	883.7		MOBILE E. 4.8 — W. 4.8	53.0	f 7.03	6.19
62 P	5.55	9.45	1.45	8.41	888.4		ENID E. 4.3 — W. 4.3	48.3	6.56	6.11
63 P	**6.03**	9.53	1.53	8.46	892.8		HEATON E. 4.8 — W. 5.5	43.9	6.50	**6.03**
N 110 S 146 WP	6.25	10.15	2.15	f 8.54	897.8	TO	MARICOPA E. 5.5 — W. 4.7	38.9	s 6.43	5.50
61 P	6.35	10.25	2.25	9.02	902.9		LIRIM E. 4.6 — W. 4.7	33.8	6.31	5.27
70 P	6.45	10.33	2.33	9.09	907.7		BON E. 5.0 — W. 5.0	29.0	6.26	5.19
63 P	6.55	10.41	2.41	9.16	912.5		NUNEZ E. 6.0 — W. 6.0	24.2	6.21	5.11
Yard Limits 88 WP	7.07	10.52	2.52	s 9.33	918.8	TO	CASA GRANDE E. 2.9 — W. 1.9	17.9	s 6.13	5.01
13 Spur					921.0		SECO E. 2.3 — W. 3.0	15.7		
61 P	7.16	11.01	3.01	9.40	923.7		ARIZOLA E. 4.8 — W. 4.8	13.0	6.05	4.53
63 P	7.24	11.09	3.09	9.47	928.4		TOLTEC E. 4.7 — W. 4.8	8.3	5.59	4.45
74 P	7.32	11.17	3.17	f 9.57	933.1	TO	ELOY E. 3.8 — W. 4.1	3.6	f 5.52	4.37
N 94 S 89 WOIYP	7.40PM	11.25AM	3.25AM	f 10.05AM	936.7	TO	PICACHO	0.0	5.45AM	4.30PM
	Arrive Daily	Arrive Daily	Arrive Daily	Arrive Daily			81.0		Leave Daily	Leave Daily
	(3.10) 25.83	(3.05) 26.53	(3.05) 26.53	(2.20) 35.06			Time over District Average Speed per Hour		(2.00) 40.90	(2.45) 29.68

RULE 5. At Gila schedule time and train orders for first class trains apply at passenger station.

At Picacho schedule time and train orders apply at junction switch.

PICACHO SUBDIVISION

EASTWARD Capacity of sidings in car lengths	Distance from San Francisco		Time Table No. 114 November 22, 1942 Christmas Branch STATIONS	Distance from Christmas
81 P	923.6		McQUEEN E. 3.8 — W. 3.6	86.9
72 P	927.0	TO	GILBERT E. 5.1 — W. 4.7	83.5
26	932.0		HIGLEY E. 3.6 — W. 3.4	78.5
9	935.6		GERMANN E. 2.4 — W. 2.4	74.9
18 P	938.1		RITTENHOUSE E. 3.6 — W. 4.0	72.4
54 P	941.6		QUEEN CREEK E. 8.0 — W. 8.0	68.9
45 P	949.8		MAGMA E. 9.3 — W. 9.2	60.7
27 WP	959.0	TO	FLORENCE E. 2.9 — W. 2.6	51.5
	961.8		BARR E. 6.5 — W. 6.5	48.7
6 Spur	968.8		DIVERSION E. 0.6 — W. 0.8	42.2
26 P	969.0		PRICE E. 6.2 — W. 6.2	41.5
26 P	975.2		COCHRAN E. 7.9 — W. 7.9	35.3
23 P	983.1		ZELLWEGER E. 1.6 — W. 1.3	27.4
5 Spur	984.6		WOOLEY E. 2.8 — W. 3.7	25.9
Yd. Limits P	987.8	TO-R	RAY JUNCTION E. 7.1 — W. 6.7	22.7
29	994.9		BRANAMAN E. 4.4 — W. 4.2	15.6
Yard Limits Y	999.2		BURNS WYE E. 0.7 — W. 0.5	11.3
28	999.7		BURNS E. 0.2 — W. 0.5	10.8
BWOP	1000.2	TO-R	HAYDEN JCT. E. 2.1 — W. 2.0	10.3
14 KP	1002.1	TO	HAYDEN E. 1.2 — W. 1.2	8.4
8 Spur	1003.5		WINKELMAN E. 1.5 — W. 1.3	7.0
	1004.7		ROCK QUARRY E. 2.3 — W. 2.3	5.8
	1007.0		FINNEY E. 2.1 — W. 2.1	3.5
2 Spur	1009.4		RUDO E. 0.8 — W. 1.3	1.1
41	1010.5		CHRISTMAS	0.0
			(86.9)	

WESTWARD

At Hayden Jct. when train-order office is open, signal governs movement of trains and engines between Christmas Branch junction switch (1584 feet east of Hayden Jct.) and Hayden Jct. train-order office. Movements between these points are authorized by signal being placed in proceed position after being called for by one long, one short and one long sound of whistle. When train-order office is closed, movements may be made between these points "With Caution" if intervening track is seen to be clear.

Normal position Christmas Branch junction switch is for Kennecott Copper Corporation Railroad. Westward trains and engines via Kennecott Copper Corporation Railroad, and via Christmas Branch, must stop to clear Christmas Branch junction switch before proceeding as authorized above.

RULE 99 must be complied with between Christmas Branch junction switch and Ray Consolidated derail on Kennecott Copper Corporation Railroad.

EASTWARD

PICACHO SUBDIVISION

WESTWARD

Capacity of sidings in car lengths	SECOND CLASS	FIRST CLASS	FIRST CLASS	Distance from San Francisco	Time Table No. 114 November 22, 1942 Nogales Branch STATIONS	Distance from Nogales	FIRST CLASS	FIRST CLASS	THIRD CLASS
	870		378				379		871
	Freight		Mexican Express				Mexican Express		Freight
	Lv. Tuesday, Friday		Leave Daily Ex. Sunday				Arrive Daily Ex. Sunday		Arrive Tues., Friday
Tucson Yard BKWFTYP	6.00 AM		10.30 AM	983.9	TO-R TUCSON TO-R TUCSON	65.9	s 4.35 PM		5.40 PM
Tucson Yard					0.8 VIA SHOP YARD E. 9.1—W. 9.8 T. & N. R. R. JCT. E. 8.7—W. 9.4	65.1			
55 P	6.35		10.52	993.8	XAVIER E. 8.7 — W. 9.2	56.0	4.13		5.07
62 P	7.00		f 11.07	1002.4	SAHUARITA E. 8.2 — W. 7.1	47.4	f 3.58		4.45
12 Spur P			f	1010.4	CONTINENTAL E. 1.7 — W. 1.7	39.4	f		
18 Spur P				1012.1	MORALES E. 3.8 — W. 3.8	37.7			
56 P	7.40		11.31	1016.3	CANOA E. 4.8 — W. 4.8	33.5	3.34		4.10
57 P	7.55		s 11.41	1021.1	AMADO E. 4.5 — W. 4.5	28.7	s 3.25		3.57
56 P	8.05		11.49 AM	1025.6	CHAVEZ E. 2.9 — W. 2.3	24.2	3.16		3.42
			f	1028.1	SOTOS CROSSING E. 5.6 — W. 6.2	21.7	f		
57 P	8.30		f 12.04 PM	1034.2	OTERO E. 6.0 — W. 5.7	15.6	f 3.01		3.20
89 Spur YP	8.50		12.14	1040.1	CALABASAS E. 9.2 — W. 9.7	9.7	2.51		3.05
Nogales Yard BKWFTP	9.30 AM		s 12.35 PM	1049.8	TO-R NOGALES	0.0	2.30 PM		2.40 PM
	Arrive Tues., Friday		Arrive Daily Ex. Sunday		(65.9)		Leave Daily Ex. Sunday		Leave Tues., Friday
	(3.30) 18.83		(2.05) 31.44		Time over District Average Speed per Hour		(2.05) 31.44		(3.00) 21.97

Rule S-72 Exception, No. 378 is superior to No. 379.

Passenger trains use shop yard route, Tucson yard.
Freight trains use T. & N. R. R. Jct. route, Tucson yard.

EASTWARD

PICACHO SUBDIVISION

WESTWARD

Capacity of sidings in car lengths	Distance from San Francisco	Time Table No. 114 November 22, 1942 Creamery Branch STATIONS	Distance from Normal Jct.
79 YP	914.4	TO TEMPE 1.0	2.1
75 Spurs	915.4	CREAMERY 1.1	1.1
13 Spurs	916.5	NORMAL JCT.	0.0
		(2.1)	

EASTWARD

PICACHO SUBDIVISION

WESTWARD

Capacity of sidings in car lengths	Distance from San Francisco	Time Table No. 114 November 22, 1942 Tempe Branch STATIONS	Distance from West Chandler
P	915.3	TEMPE JCT. 2.4	7.7
20	917.7	PETERSON 2.4	5.3
48	920.1	HELENA 2.9	2.9
	923.0	WEST CHANDLER	0.0
		(7.7)	

EASTWARD

BOWIE SUBDIVISION

WESTWARD

Capacity of sidings in car lengths	SECOND CLASS	FIRST CLASS	FIRST CLASS	Distance from San Francisco	Time Table No. 114 November 22, 1942 Globe Branch STATIONS	Distance from Live Oak	FIRST CLASS	FIRST CLASS	SECOND CLASS
	884		382				381		883
	Local Freight		Motor				Motor		Local Freight
	Leave Daily Ex. Monday		Leave Daily				Arrive Daily		Arrive Daily Ex. Sunday
Yard Limits BKWFYP	8.00 AM		4.05 PM	1098.4 1097.9	TO-R BOWIE E. 9.0 — W. 8.6	136.4	s 2.35 PM		4.55 PM
50 P	8.25		4.22	1107.4	ESCALA E. 10.5 — W. 10.4	126.9	2.11		4.22
13 P	8.50		f 4.38	1117.8	TANQUE E. 7.3 — W. 7.3	116.5	f 1.52		3.50
42 P	9.05		4.49	1125.1	HAECKEL E. 8.5 — W. 7.6	109.2	1.39		3.30
38 P	9.25		s 5.02	1132.6	SOLOMON E. 1.8 — W. 2.3	101.7	s 1.27		3.10
21 Spur				1135.3	LONE STAR E. 1.8 — W. 2.5	99.0			
Yard Limits 52 WP	10.20		s 5.15	1137.5	TO SAFFORD E. 3.2 — W. 2.9	96.8	s 1.15		2.40
34 P	10.35		s 5.25	1140.6	THATCHER E. 2.7 — W. 2.4	93.7	s 1.03		1.15
				1143.1	CENTRAL E. 2.4 — W. 2.6	91.2			
28 P	10.55		s 5.36	1145.6	TO PIMA E. 1.1 — W. 1.5	88.7	s 12.53		1.00
62 P	11.14		5.40	1146.7	DUBLIN E. 2.2 — W. 1.7	87.6	12.49		12.49
				1148.9	GLENBAR E. 4.0 — W. 3.5	85.4			
59 P	11.45 AM		f 5.51	1153.0	CORK E. 2.0 — W. 2.3	81.3	f 12.39		12.25
				1154.8	ASHURST E. 4.4 — W. 5.0	79.5			
59 P	12.03 PM		s 6.04	1159.3	TO FT. THOMAS E. 4.4 — W. 4.4	75.0	s 12.28		12.03 PM
17 WP	12.18		f 6.13	1164.2	GERONIMO E. 6.2 — W. 6.2	70.1	f 12.18		11.50 AM
54 P	12.40		f 6.24	1170.1	BYLAS E. 6.7 — W. 6.6	64.2	f 12.06 PM		11.35
52 P	12.57		f 6.36	1176.8	CALVA E. 14.2 — W. 14.2	57.5	f 11.54 AM		11.20
52 P	1.40		7.04	1191.0	DILI E. 6.4 — W. 5.9	43.3	11.26		10.40
P			f	1197.3 1197.2	PERIDOT E. 3.6 — W. 4.2	37.0	f		
52 WP	2.10		s 7.25	1201.0	TO SAN CARLOS E. 7.0 — W. 6.4	33.2	s 11.05		10.10
20 Spur P				1207.8	REPPY E. 5.2 — W. 5.7	26.4			
43 P	2.50		f 7.52	1213.5	CUTTER E. 6.1 — W. 5.9	20.7	f 10.41		9.40
Yd. Limits 20 P	3.10		8.08	1219.3	PINAL E. 1.5 — W. 3.6	14.9	10.29		9.23
Yd. Limits BKWOTP	3.20 PM		s 8.15 PM	1221.5	TO-R GLOBE E. 5.5 — W. 3.3	12.7	10.20 AM		9.10 AM
13 P				1226.2	RADIUM E. 1.2 — W. 1.0	8.0			
3 Spur				1227.3	BURCH E. 2.8 — W. 3.0	6.9			
Yard Limits 9 Spur				1230.2	CLAYPOOL E. 1.6 — W. 2.6	4.0			
Yard Limits WYP				1231.9	TO-R MIAMI E. 1.4 — W. 0.1	2.3			
Yard Limits 27				1233.0	INSPIRATION JCT. E. 1.2 — W. 1.2	1.2			
Yard Limits 14				1234.2	LIVE OAK	0.0			
	Arrive Daily Ex. Monday		Arrive Daily		(136.4)		Leave Daily		Leave Daily Ex. Sunday
	(7 20) 16.87		(4.10) 29.69		Time over District Average Speed per Hour		(4.15) 29.11		(7.45) 15.96

All train and engine movements must be preceded by section crew from Inspiration Jct. to Live Oak.

EASTWARD

BOWIE SUBDIVISION

WESTWARD

Capacity of sidings in car lengths	SECOND CLASS						FIRST CLASS				Distance from San Francisco	STATIONS	Distance from Lordsburg	FIRST CLASS		SECOND CLASS
	866	964	864	962	862	960	4	6	44	2		Time Table No. 114 November 22, 1942		43	1	845
	Freight	Freight	Freight	Freight	Freight	Freight	Golden State Limited	Argonaut	Californian	Sunset Limited				Californian	Sunset Limited	Freight
	Leave Daily	Leave Daily	Leave Daily	Leave Daily	Leave Daily	Leave Daily	Leave Daily	Leave Daily	Leave Daily	Leave Daily				Arrive Daily	Arrive Daily	Arrive Daily
Tucson Yard BKW FTYP	5.45 PM	4.05 PM	8.40 AM	7.45 AM	1.45 AM	12.01 AM	1.55 PM	12.05 PM	9.50 AM	1.35 AM	983.9	TO-R TUCSON E. 0.8 — W. 0.8				
											984.7	T. & N. R. R. JCT. E. 3.2 — W. 3.4				
4 Spur	5.58	4.20	8.53	8.00	1.58	12.15	2.04	12.14	9.59	1.45	987.7	POLVO E. 2.8 — W. 2.6				
13 Spur P											990.7	WILMOT E. 2.7 — W. 3.4				
63 P	6.13	4.40	9.08	8.20	2.13	12.35	2.15	12.25	10.10	1.56	993.8	RANKIN E. 5.2 — W. 4.5 Track No. 2				
P											998.6	ESMOND E. 4.2 — W. 5.4				
63 P	6.35	5.05	9.30	8.45	2.35	1.00	2.32	f 12.41	10.27	2.12	1003.8	VAIL E. 9.1 — W. 9.3				
79 WP	6.57	5.40	9.52	9.20	2.57	1.35	2.49	f 12.59	10.44	2.29	1012.6	PANTANO E. 11.0 — W. 11.1				
N94 S85 CIYP	7.30	6.20 PM	10.25	10.01 AM	3.30	2.15 AM	3.10 PM	f 1.20	11.05 AM	2.48	1023.6	TO-R MESCAL E. 4.8 — W. 3.7	124.7	f 6.01 PM	3.15 AM	2.20 PM
77 P	7.40		10.35		3.40			1.27		**2.58**	1028.2	CHAMISO E. 4.4 — W. 5.9	120.1	5.50	**2.58**	2.05
E118 Yd. Lmts. W70 BKWOP	8.00		10.55		4.00			s **1.41**		s 3.13	1032.6 1032.5	TO BENSON E. 3.3 — W. 2.7	115.7	s 5.37	s 2.45	**1.41**
62 P	8.12		11.07		4.12			1.48		3.20	1035.8	FENNER E. 2.5 — W. 2.6	112.5	5.25	2.33	1.24
83 P	8.23		11.18		4.23			1.55		3.26	1038.5	CURVO E. 2.7 — W. 2.6	109.8	5.20	2.28	1.17
75 WP	8.34		11.29		4.34			2.03		3.33	1041.0	TO SIBYL E. 2.9 — W. 2.8	107.3	5.15	2.23	1.09
63 P	8.43		11.38		4.43			2.09		3.39	1043.9	TULLY E. 3.2 — W. 3.2	104.4	5.10	2.18	1.01
63 P	8.52		11.47		4.52			2.16		3.46	1047.3	OCHOA E. 3.8 — W. 3.7	101.0	5.05	2.13	12.52
65 P	9.01		11.56 AM		5.01			2.23		3.53	1050.8	LANCHA E. 2.8 — W. 2.9	97.5	5.00	2.08	12.43
E65 W65 YP	9.14		12.09 PM		5.14			s 2.31		4.00	1053.9	TO DRAGOON E. 4.5 — W. 4.7	94.4	f 4.55	f 2.04	12.35
81 P	9.24		**12.19**		5.24			2.37		4.06	1058.3	MANZORO E. 5.2 — W. 5.3	90.0	4.46	1.56	**12.19**
90 P	9.33		12.28		5.33			s 2.46		4.13	1063.9	TO COCHISE E. 5.9 — W. 5.6	84.4	f 4.37	1.48	12.07 PM
64 P	9.42		12.37		5.42			2.53		4.19	1069.6	A B S HADO E. 5.2 — W. 5.2	78.7	4.27	1.40	11.55 AM
68 WP	9.51		12.46		5.51			s 3.04		f 4.26	1074.7	TO WILLCOX E. 4.6 — W. 4.6	73.6	s 4.18	1.33	11.46
61 P	10.01		12.56		6.01			3.11		4.32	1079.4	DRURY E. 2.9 — W. 3.2	68.9	4.07	1.26	11.37
99 P	10.13		1.08		6.13			3.17		4.38	1082.6	TO RASO E. 5.2 — W. 4.9	65.7	4.03	1.22	11.31
64 P	10.22		1.17		6.22			3.25		4.45	1087.7	ALRICH E. 3.6 — W. 3.6	60.6	3.53	1.13	11.16
64 P	10.28		1.23		6.28			3.30		4.49	1091.0	LUZENA E. 3.4 — W. 3.4	57.3	3.45	1.05	11.06
63 P	10.34		1.29		6.34			**3.38**		4.53	1094.5	CHOLLA E. 3.2 — W. 4.8	53.8	**3.38**	1.00	11.00
Yard Limits BKWFYP	10.55		1.50		6.55			s 3.58		s 5.05	1098.4	TO-R BOWIE E. 4.9 — W. 3.2	49.9	s 3.30	s 12.52	10.50
64 P	11.04		1.59		7.04			4.05		5.12	1102.6	HOLT E. 4.1 — W. 4.1	45.7	3.11	12.37	10.37
63 P	11.11		2.06		7.11			4.10		5.17	1106.6	OLGA E. 3.5 — W. 3.5	41.7	3.06	12.32	10.31
63 P	11.18		2.13		7.18			4.15		5.22	1110.2	KARRO E. 3.7 — W. 4.1	38.1	3.01	12.27	10.25
63 BKWFYP	11.25		2.20		7.25			s 4.22		5.28	1114.2	TO SAN SIMON E. 3.6 — W. 3.1	34.1	s 2.56	12.22	10.19
64 P	11.40		2.34		7.39			4.27		5.33	1117.6	BAWTRY E. 4.4 — W. 4.4	30.7	2.49	12.17	10.13
74 P	11.52 PM		**2.44**		7.51			4.33		5.39	1121.8	VANAR E. 3.1 — W. 3.2	26.5	**2.44**	12.12	10.06
70 P	12.07 AM		2.55		8.00			4.39		5.45	1125.0	CAVOT E. 3.7 — W. 3.7	23.3	2.39	**12.07 AM**	10.00
E66 W69 YP	12.25		3.15		8.20			f 4.51		5.57	1128.9	TO STEINS E. 3.8 — W. 3.7	19.4	f 2.31	11.59 PM	9.50
62 P	12.32		3.22		8.27			4.56		6.03	1132.7	MONDEL E. 4.1 — W. 4.1	15.6	2.24	11.52	9.36
63 P	12.39		3.29		8.34			5.01		6.08	1136.5	CONRAD E. 4.3 — W. 4.3	11.8	2.19	11.47	9.29
62 P	12.47		3.37		8.42			f 5.07		6.14	1140.8	GARY E. 3.0 — W. 3.0	7.5	f 2.13	11.41	9.21
63 P	12.54		3.44		8.49			5.12		6.19	1143.9	PYRA E. 3.7 — W. 5.0	4.4	2.08	11.37	9.15
Yard Limits BKWFTYP	1.05 AM		3.55 PM		9.00 AM			s 5.20 PM		s 6.27 AM	1148.3	TO-R LORDSBURG	0.0	2.01 PM	11.30 PM	9.05 AM
	Arrive Daily	Arrive Daily	Arrive Daily	Arrive Daily	Arrive Daily	Arrive Daily	Arrive Daily	Arrive Daily	Arrive Daily	Arrive Daily		(164.4)		Leave Daily	Leave Daily	Leave Daily
	(7.20) 22.42	(2.15) 17.65	(7.15) 22.68	(2.16) 17.51	(7.15) 22.68	(2.14) 17.77	(1.15) 31.76	(5.15) 31.31	(1.15) 31.76	(4.52) 33.78		Time over District Average Speed per Hour		(4.00) 31.18	(3.45) 33.25	(5.15) 23.76

Be Governed by Current Time Table and Bulletins of Rio Grande Division.

Westward trains will use track No. 1, Rio Grande Division, Mescal to Tucson, and eastward trains will use track No. 2, Tucson Division, Tucson to Mescal, under double track rules.

ADDITIONAL FLAG STOPS TO RECEIVE OR DISCHARGE PASSENGERS

Train	At	Receive or Discharge	To (or beyond)	From (or beyond)
1	Willcox, Cochise	Discharge		East of El Paso

SPECIAL INSTRUCTIONS

"SAFETY"

RULE 2. Watch Inspectors:

S. A. Pope, Manager of Time Service	65 Market St., San Francisco
Yuma	Wm. Baird
Yuma	J. H. Huber
Phoenix	H. H. Howard
Tucson	Greenwald & Adams
Tucson	H. L. Tucker
Nogales	E. M. Mather
Lordsburg	H. H. Conder
Globe	J. G. Cubitto
Miami	J. G. Cubitto, Jr.

RULES 10 (G) and 10 (H). On tracks No. 1 and No. 2 between Tucson and Polvo, signals will be placed on left of track in direction of movement.

RULE 14. Other engine whistle signals:
For diverging route, 0 ——— 0.
For siding, ——— 0 ———.

RULE 14 (d). As specified below, —— —— —— —— 0 sounds of whistle will be indication that flagman may return from west as prescribed by Rule 99:

Phoenix Yard—Kendall, Trains on Second Main Track.
Normal Jct., Trains on Creamery Branch.
Picacho, Trains on Phoenix Line.

RULE 14 (e). As specified below, —— —— —— —— —— —— sounds of whistle will be indication that flagman may return from east as prescribed by Rule 99:

Wellton, Trains on Phoenix Line.
Litchfield, Trains on Litchfield Branch.
Kendall—Phoenix Yard, Trains on Second Main Track.
Tempe, Trains on Creamery Branch.
Tempe Jct., Trains on Tempe Branch.
McQueen, Trains on Christmas Branch.
T. & N. R. R. Jct., Trains on Nogales Branch.
Mescal, Trains on Rio Grande Division.
Bowie, Trains on Globe Branch.

RULE 14 (k). Also sound signal when passing rear of train, to be acknowledged by trainmen by signal 12 (c).

RULE 14 (l). When sounding warning signal 14 (l) approaching grade crossings, Arizona State law requires that steam whistle be used if engine is so equipped.

RULE 17. Mars Signal Light on engines shall be used when engine is moving at night, and in foggy or stormy weather. It must be dimmed or extinguished approaching passenger stations, and at other points as prescribed by rules. For identification purposes must be dimmed.

RULE 17 (C). For identification purposes, headlights may be dimmed when passing the head end and rear end of trains on adjoining tracks, except when nearing street or highway crossings.

RULE 21 (C). At Phoenix, Gila and Tucson, incoming engines may display indicators until arrival at roundhouse.

RULE 28. In double track territory signals will be placed to right of track according to direction of movement of train to be flagged. Trains in opposite direction will not be required to observe signals so placed.

RULES 72 and 73. Second-class and extra trains may move irrespective of time table superiority Phoenix to Phoenix Yard when moving with the current of traffic.

At Tucson, after receiving proceed signal from yardman located near derail on west lead, PFE Yard, Tucson, using white flag by day and green light by night, second-class and inferior trains and engines may move with current of traffic, irrespective of time-table superiority, from PFE Yard to North Yard, and upon receiving proceed signal from yardman with a white flag by day and a green light by night in the vicinity of Park Avenue and Sixth Avenue, may proceed to Stockham with current of traffic irrespective of time-table superiority, avoiding delays to first-class trains.

RULE S-72. Westward trains are superior to trains of the same class in the opposite direction, except as shown on Pages 3 and 6.

RULE 83. Identification of trains may be made on double track between Yuma and East Yard; Dome and Wellton; Stockham and Tucson; Phoenix and Phoenix Yard; to be applied at end of double track; and on second main track between Phoenix Yard and Kendall, to be applied at Kendall. Trains approaching each other between these stations must reduce speed sufficiently to permit identification and Rule 14 (k) will apply.

RULE 83 (A). At the following stations, only the trains indicated will register:

Phoenix—First-class trains.
Mescal—All trains.
Bowie—All trains.

RULE 83 (B). At open train-order offices trains may register by ticket as follows:

Phoenix Yard	First-class trains
Mescal	All trains
Bowie	All trains except on Globe Branch

Tucson—Engineers of light engines from east will leave register ticket with engine dispatcher for delivery to operator for registration.

RULE 83 (E). A train may check the register against an extra when authorized by train order in the following form: "...may check register at......against Extra......on order No. ....". A train so authorized to check the register must also register.

An extra when instructed by train order in the following form: "Extra ......register at......on order No. ...." will register, and place this order number and date in column captioned "Signals."

RULE 93. Second and third paragraphs of Rule 93 apply to all tracks within yard limits.

Yard limits in which the provisions of Rule 93 will apply are established at the following points:

	West	East
Yuma	MP 731.50	MP 737.80
Phoenix	MP 900.96	MP 908.79
Mesa	MP 920.45	MP 923.23
Ray Jct.	MP 986.84	MP 988.72
Hayden Jct.	MP 998.80	MP 1004.90
Gila	MP 854.20	MP 857.70
Casa Grande	MP 917.00	MP 920.33
Tucson	MP 981.96	MP 989.00 (Track 2)
		MP 988.09 (Track 1)
		MP 987.42 (Nog. Br.)
		MP 990.37 (So. Line)
Nogales	MP 1046.37	MP 1049.89
Benson	MP 1031.60	MP 1034.01
Bowie	MP 1097.10	MP 1100.00
Bowie—Globe Branch		MP 1099.50
Lordsburg	MP 1147.19	MP 1151.38
Safford	MP 1136.65	MP 1138.34
Globe	MP 1218.70	MP 1223.22
Miami	MP 1229.82	MP 1234.20

Comply with third paragraph Rule 93 within portions of main track not protected by automatic block signals which are located and described as follows:

Phoenix—Union Station and main track, between "Block System Limit" sign opposite dwarf signal 9059 and "Block System Limit" sign at MP 906.2 on westward main track and dwarf signal 9064 on eastward main track.

Tucson—Passenger tracks Nos. 1, 2 and 3. Eastward between end of double track at MP 983.66 and dwarf light Signal 9838. Westward between "Block system limit" sign opposite dwarf light Signal 9838 and end of double track at MP 983.66.

RULE 95. Sections of Eastward schedules may be arranged from Phoenix, by telegram from Chief Train Dispatcher, to Phoenix Yard, where train order authority will be placed.

RULE 97. Extra trains must not run via Creamery Branch unless train order so specifies.

RULE D-97 (A). Will apply between Phoenix and Phoenix Yard.

RULE 99. When roadway machines (ditchers, pile drivers, power shovels, crane and derrick cars) are operated on double track or on tracks immediately adjacent to the main track, or off track adjacent to main tracks, boom or other parts of the machine must not be operated to foul main track, without proper flag protection. Such equipment must be at rest and clear of main tracks when trains are passing.

Flag protection must be provided on adjacent main tracks which closely parallel track on which ballast or other material is being loaded or unloaded. Operations must be stopped when trains on main track are passing.

In territory where head-free rail is laid, unless torpedoes with spring clamps are used, duplicate torpedoes must be placed on the opposite rail so as to afford maximum protection.

Head-free rail is rail on which the square corners on under side of head are beveled up to about 60 degrees slope to within approximately one-half inch of top of rail.

At Tucson Passenger Station, first-class trains will move with caution on passenger tracks Nos. 1, 2 and 3, between end of double track at MP 983.66 and end of double track at MP 984.12. Trains standing on passenger tracks within these limits need not protect against first-class trains, but will comply with Rule 99-A.

RULE 103 (A). A flagman must precede all movements over:

Yuma, 1st, 2nd, 3rd and 4th Sts.
Tovrea, Washington St.
Tempe (Creamery Branch), Mill Ave. and 8th St.
Naviska, U. S. Highway 84.
Tucson, West Congress St.
Nogales, Court and Park Sts.
Globe, Hackney St. and eastward over Murphy St.
Miami, Latham Blvd., Adonis Ave. and Miami Copper Co. highway crossing.

In general, highway crossing signals are so designed that they will not operate for trains or engines making a reverse movement after having passed over the crossing. Trains or engines making such reverse movements must protect the crossing unless it is known that signals are operating.

RULE 103 (B). Back-up hose must be used when making back-up movements with cars, between Hayden Jct. and Hayden Mills, and between North and South yards and/or P. F. E. yard, Tucson.

RULE 104. NORMAL POSITION OF SWITCHES AT THE END OF DOUBLE TRACK AND AT JUNCTIONS:

East Yard	Spring switch end double track, for trains entering the double track.
Dome	Spring switch at end of double track, for trains entering double track.
Wellton	Switches to Phoenix main track, for Gila Line main track.
Litchfield	Switch to Litchfield Branch, for Phoenix Line main track.
Phoenix	Spring switch at west end freight lead and main track, for main track. West end of double track, for westward main track.
Phoenix Yard	Spring switch at east end double track, for trains entering the double track.
Tempe	Switch for Creamery Branch, for Phoenix Line main track.
Tempe Jct.	Switch to Tempe Branch, for Phoenix Line main track.
Normal Jct.	Switch to Creamery Branch, for Phoenix Line main track.
McQueen	Cross-over switch to Christmas Branch, for Phoenix Line main track.
Picacho	Normal position of junction switch for Gila Line. Operators will handle switches near train-order office for movements to and from Phoenix Line and both sidings.
Stockham	Spring switch end double track, for trains entering the double track.
Tucson	Switch to Nogales Branch, via shop yard, for passenger track No. 1.
Tucson	Switch to Nogales Branch, via T. & N. R. R. Junction, for main line track No. 1.

DERAILS IN MAIN TRACK:

Litchfield Park, 320 feet west of east end of track.
Christmas, 250 feet east of west switch.
Nogales, 221 feet west of west switch, may be trailed through by eastward trains.

Wilmot, two derails on tracks serving Davis-Monthan Field. One derail is located on north rail 1336 feet west of main line switch and one derail is located on south rail 530 feet east of switch to No. 3 track, gasoline spur.

RULE 105. FOLLOWING TRACKS ARE DESIGNATED FOR USE AS SIDINGS:

Fowler	Track north of main track.
Mesa	Track south of main track.
Ray Junction	Track north of main track.
Mohawk	First track north of main track, for eastward trains. Second track north of main track, for westward trains.
Sentinel	Track north of main track, for westward trains. Track south of main track, for eastward trains.
Red Rock	Track north of main track, for eastward trains. Track south of main track, for westward trains.
Jaynes	Track north of main track, for westward trains. Track south of main track, for eastward trains.
Benson	Track north of main track, for eastward trains. Track south of main track, for westward trains.
Dragoon	Track north of main track, for westward trains. Track south of main track, for eastward trains.

Bowie	Track north of main track, from west switch to switch just east of station building, for eastward trains.
	Track north of main track, from east switch to switch just east of station building, for westward trains.
Steins	First track north of main track, for westward trains.
	Second track north of main track, for eastward trains.
San Carlos	Track north of main track.

Abbreviations used for sidings: "E" for Eastward, "W" for Westward, "M" for Middle, "N" for North, "S" for South.

RULE 204. Trains of Wellton and Picacho subdivisions with the same conductor operating through Phoenix may be issued train orders on one subdivision that affect their movement on either or both subdivisions, and these orders must be delivered by engineer to relieving engineer.

RULE 221. Trains must obtain clearance before leaving Tempe to or from Creamery Branch, and at Bowie and Miami.

Trains must obtain clearance at Phoenix Yard, except westward trains terminating at Phoenix.

Trains originating at Phoenix must obtain clearance before leaving Phoenix Yard.

RULE 824. INSTRUCTIONS FOR SETTING HAND BRAKES:

YUMA	
Freight Trains	Four brakes on east end.
East Yard	Ten brakes on west end. Five brakes on east end.
PHOENIX	
Freight Trains	Two brakes on west end. Two brakes on east end.
TUCSON	
Passenger Trains	Two brakes on west end. Two brakes on east end.
Freight Trains	Fifteen brakes on west end. Ten brakes on east end.
TUCSON—P.F.E. YARD	
Each cut of cars	Seven brakes on west end.
S. P. tracks Nos. 1 to 11 incl.	Fifteen brakes on west end.

Hand brakes on passenger trains are to be set after engine is spotted for taking oil. If necessary to detach engine after these hand brakes have been released, employe before detaching engine must see that sufficient hand brakes have again been set.

Hand brakes on freight trains must be securely set after train or cut has stopped, unless yardmen immediately take charge and yard engine is coupled to cars. Any employe releasing any of these brakes must set as many others to replace them.

RULE 825. Outfit cars must not be left next to oil or gasoline loading or unloading locations; warehouses; lumber yards or other buildings.

RULE 834. Tank cars, or open-top cars loaded with rail, pipe, structural steel, lumber, poles or mounted wheels, when such lading projects above sides and end walls of car, must not be placed in train next to cab of cab-in-front type AC class engines.

RULE 836. Cars moved from one station to another ahead of engine on descending grade must be chained to the engine. Switching movement on descending grades must be protected by a derail. When practicable engine must be kept on descending grade end of cars.

When necessary to move cars ahead of engine 20 MPH must not be exceeded.

RULE 883. Engines under steam must not be stored or left unattended on tracks that are not protected by derails against entry to main track. When chains or blocking available wheels must be blocked.

AUTOMATIC BLOCK SYSTEM

RULE 509. When making a reverse movement on main track after moving out of siding or other track, in block system limits, train or engine will, unless movement be completed beyond the governing signal, proceed as if signal be in stop position.

Trains when moving in a direction for which block signals are not provided, will be considered as being outside of block system limits, and will comply with Rule 91.

The following block signals equipped with triangular number plate displaying the letter "P" have included in their control limits some special protective device. When these signals indicate "stop," in addition to complying with Rule 509, careful inspection must be made of the track or structure, as indicated below, and it must be known that they are safe for passage of trains before proceeding:

Signal	Protects	Location
P-7372	Spring Switch	End of double track, East Yard
P-7375	" "	" " " " " "
P-7532	" "	End of double track, Dome
P-7535	" "	" " " " "
P-9052	" "	West end of freight lead, Phoenix
P-9075	" "	East end of double track, Phoenix Yard
P-9376	" "	East switch of south siding Picacho
P-9377	" "	" " " "
P-9378	" "	" " " " "
P-9402	" "	East switch Ocatilla
P-9411	" "	" " "
P-9436	" "	East switch Wymola
P-9445	" "	" " "
P-9508	" "	East switch of east siding Red Rock
P-9521	" "	" " " " " " "
P-9576	" "	East switch Naviska
P-9587	" "	" " "
P-9668	" "	East switch Rillito
P-9673	" "	" " "
P-9716	" "	East switch Cortaro
P-9725	" "	" " "
P-9776	" "	East switch of east siding Jaynes.
P-9777	" "	" " " " " "
P-9778	" "	" " " " " "
P-9810	" "	End of double track, Stockham
P-9813	" "	" " " " "
P-11322	" "	West switch Mondel
P-11329	" "	" " "

At Yuma, operation through gantlet track over Colorado River Bridge will be governed by positive block Signals 7320 and 7322 west of bridge, and Signals 7321 and 7323 east of bridge. Speed of 8 MPH must not be exceeded until engine has cleared gantlet track. Trains and engines will operate within the above limits, in accordance with positive block signal indications, which supersede the superiority of trains. Second-class and inferior trains and engines must not occupy positive block or overlaps in connection therewith when it is known a first-class train will thereby be delayed.

When signals indicate "stop" and no train or engine in block, send flagman ahead immediately and after flagman has traversed block to opposing signal, proceed with caution.

Signal 7320 governing eastward movement against the current of traffic on westward main track will indicate "proceed" only when train or engine is on approach circuit and push-button opposite signal is pressed.

Signal 7321 governing westward movement against the current of traffic on eastward main track will indicate "proceed" only when train or engine is within 275 feet of signal.

When a train or engine has received a proceed indication from either Signal 7323 or 7321 and is holding the indication by reason of standing within less than 275 feet of signal, the signal may be released and "proceed" indication secured on adjoining track by operating proper push-button located on signal case adjoining Signal 7323 after train it is desired to move has entered approach circuit. Operating push-button 7321-PB will place Signal 7321 at "stop" and clear Signal 7323. Operating push-button 7323-PB will place Signal 7323 at "stop" and clear Signal 7321.

Signal 7322 will not indicate "proceed" until after engine has passed overlap post located 1100 feet west of this signal.

Eastward trains waiting at Colorado for a westward train will remain west of overlap post.

Directions for use and operation of push-buttons located inside push-button box.

Westward trains moving against the current of traffic from crossover at east end of Yuma yard, Signal 7341 will display stop indication, and train will be required to stop before passing signal. If switches are properly lined and route clear, yardman will then signal engineman with green flag by day and green light by night, as authority to proceed against the current of traffic with caution, not exceeding 15 MPH.

If necessary to move a westward passenger train through the freight yard from the east end of yard to passenger station, yardman will verbally inform engineer of this fact and notify him as to track which is to be used. Trains under such conditions must move with caution not exceeding 10 MPH.

At Phoenix, Crossing - AT & SF Wye.

Signal 9052 governs eastward movements.
Signal 9053, on main track, and
Signal 9055, on freight lead, govern westward movements.

If either of these signals indicate "stop," train or engine, after stopping, and observing wye track to be clear of opposing movements, may proceed in accordance with Rule 509, and in addition must provide flag protection on the intersecting track unless derail thereon is in derailing position.

At Kendall, eastward trains on main track, stop west of Signal 9112 to wait for or meet opposing trains.

Eastward trains on second main track will be governed by position of Signals 9112 and 9113 before entering main track.

At Picacho, Signal 9374 will require a two-minute interval to clear after switch on north siding is lined for movement to main track if it is desired to make an eastward movement from north siding ahead of eastward train on main track or eastward train occupying approach circuit on south siding.

Push buttons and indication lights for releasing and clearing of Signals P-9376 and P-9378 under conditions described below will be located in box on west side of signal case P-9376 and must be operated as follows:

When eastward train is on main track west of Signal P-9376 and it is desired to make eastward movement from south siding ahead of eastward train onto main track, member of crew will press button 9378 and hold same until indication light opposite button is illuminated. After an interval of two minutes, Signal P-9378 will indicate "proceed" if block is clear.

Eastward train on south siding to let eastward train pass on main track must not pass approach circuit sign located 500 feet west of Signal P-9378 unless necessary. If necessary to occupy approach circuit to prevent delay to eastward train on main track, member of crew will immediately press button 9376 and hold same until indication light opposite push-button is illuminated. After an interval of two minutes, Signal P-9376 will indicate "proceed" for eastward train on main track if block is clear.

Signal P-9377. Upper unit will govern movement on main track. Middle unit will govern movement to and on north siding. Lower unit will govern movement to and on south siding. When middle or lower unit indicates "caution" a preceding movement on siding is indicated.

Take-siding indicator located on Signal 9385 and directly below this indicator will be two units which will indicate in conjunction with the illumination of the "S" of the take-siding indicator, an illuminated "N" if train is to enter north siding and an illuminated "S" if train is to enter south siding.

At Jaynes, push buttons and indication lights for releasing and clearing of Signals 9776 and 9778 under certain conditions are located in box on west side of signal case 9776 and must be operated as follows:

When eastward train is on main track west of Signal 9776 and it is desired to make eastward movement from siding ahead of eastward train on main track, member of crew will operate push-button 9778 and hold same until indication light opposite button is illuminated. After an interval of two minutes, dwarf signal 9778 will indicate "proceed" if block is clear.

Eastward train on siding to let eastward train pass should not pass approach circuit sign located 500 feet west of dwarf signal 9778 unless necessary. If necessary to occupy approach circuit, member of crew will immediately operate push-button 9776 and hold same until indication light opposite push-button is illuminated to prevent delay to train on main track. After an interval of two minutes, Signal 9774 will indicate "proceed" for passing train if block is clear. If signals involved do not indicate "proceed" Rule 509 will govern.

At Tucson, account no overlap on light Signal 9838 located just east of Tucson yard office, and no overlap on light Signal 9841 located just west of car shop on Nogales Branch, trains and engines moving between these signals, and on passenger track No. 1 between west end of car shed and light Signal 9838, must do so with caution.

On track No. 2 between Tucson and Mescal:

Eastward trains will be governed by Rule 509 applicable to double track.

Westward trains Mescal to Esmond will be governed by Rule 509 applicable to single track.

Westward trains Esmond to Tucson will have no block signal protection after passing Signal 9978.

Between Tucson and Polvo, automatic signals are on the left of the track in the direction of movement.

SPRING SWITCHES

Spring Switches are identified by target on switch stand bearing the letters "SS."

When a block signal in advance of a facing point spring switch indicates "stop", careful examination of switch must be made before passing over it. When making trailing point movement and train is stopped on switch, a reverse movement must not be made, nor the slack taken until the switch has been thrown by hand. When movement has been completed through switch, reverse movement must not be made until point closes.

Running switches are prohibited and sand, blow-off cocks and injectors must not be used or boosters started while engine is standing on or passing over such switches.

These switches located as follows and speed indicated must not be exceeded when passing over these switches:

		Signal	MPH Pass.	MPH Frt.
East Yard	Trailing eastward	7372	25	25
	Facing westward	7375	60	40
Dome	Facing eastward	7532	25	25
	Trailing westward		30	30
Phoenix	Main track and west end freight lead:			
	Facing eastward	9052	15	15
	Trailing westward	....	15	15
Phoenix Yard	East end double track:			
	Trailing eastward	....	15	15
	Facing westward	9075	15	15
Picacho	East switch of south siding:			
	Trailing eastward	9376 & 9378	25	20
	Facing westward	9377	65	40
Ocatilla	Trailing eastward	9402	25	20
	Facing westward	9411	65	40
Wymola	Trailing eastward	9436	25	20
	Facing westward	9445	65	40
Red Rock	East switch of east siding:			
	Trailing eastward	9508	25	20
	Facing westward	9521	65	40
Naviska	Trailing eastward	9576	25	20
	Facing westward	9587	65	40
Rillito	Trailing eastward	9668	25	20
	Facing westward	9673	65	40
Cortaro	Trailing eastward	9716	25	20
	Facing westward	9725	65	40
Jaynes	East switch of east siding:			
	Trailing eastward	9776 & 9778	25	20
	Facing westward	9777	65	40
Stockham	Trailing westward	9813	35	35
	Facing eastward	9810	50	35
Mondel	Trailing westward	11329	25	20
	Facing eastward	11322	50	35

RULE 511. Within block system limits after switches of a crossover are thrown wait three minutes before crossing over unless block signals protecting the movement can be seen to be in stop position not less than one-half mile distant.

RULE 516. Overlap posts located as follows:

23rd Ave. Phoenix	Middle of Siding	Eastward trains.
	" " "	Westward trains.
McQueen	" " "	Eastward trains.
Roskruge	" " "	Eastward trains.
	" " "	Westward trains.
Cortaro	" " "	Eastward trains.

INTERLOCKING

WELLTON

Limits extend from two-arm signals on Gila Line and on Phoenix Line 4,000 feet east of station building to light signal on westward track 400 feet west of station building and to two-arm signal on eastward track 1,000 feet west of station building.

The derail at east end of siding is electrically locked, and can be operated by trainmen only when released by signal operator.

Switches and derails to spurs leading from westward main track, just west and east of station building are hand-thrown, but must not be used until permission is secured from signal operator.

PICACHO

Limits extend between eastward signals 9366-SA and 9796-SA and westward signals 9801-SA, 9369-SA and 9367-SA.

When middle or lower units of signals 9366-SA or 9796-SA indicate caution a preceding movement is indicated on siding beyond interlocking limit.

West end of north siding will be at signal 9801-SA and west end of south siding will be at signal 9367-SA and siding is incorporated in automatic block signal system.

TUCSON, SIXTH AVENUE

Limits on eastward track from interlocking signal opposite automatic block signal 9835 to end of double track and on westward track from end of double track to signal 9835.

Limits on Independent Icing Lead between main track switch and dwarf signal located approximately 240 feet west of Sixth Avenue Interlocking Tower.

Limits on freight train yard lead between main track switch on westward main track and dwarf signal located 240 feet west of Sixth Avenue Interlocking Tower.

One long sound of the engine whistle will be signal to Towerman for movement via Independent Icing Lead and westward main track with current of traffic. Whistle signal to be used only when necessary.

Signals prescribed by Rule 628 may be given from tower.

MESCAL

Interlocking signals of the Rio Grande Division will display indication in the upper quadrant. Signal arm extended upward parallel to signal mast indicates "proceed."

Limits are between home signals governing east switch of east crossover and west switch of west crossover on Rio Grande Division, and home signals governing east and west switches of sidings on Tucson Division. Switches are controlled by signal operator, except switches leading from north siding to water and outfit spurs; from south siding to both legs of wye and to west end of coal track. Switch and derail east end coal track are hand-thrown but must not be used until permission is secured from signal operator.

Where hand signals, as prescribed by Rule 628, cannot be seen, trains stopped will call the signal operator and secure permission to proceed; also to throw switches by hand in event the remote control appliance is inoperative.

RULE 663 (b). When authority is received by telephone to proceed through the limits of an inoperative interlocking signal, member of the crew must make careful examination of facing point switches before passing over them.

TRAIN INSPECTION

Trains containing carload shipments of T. N. T. bombs, loaded projectiles and other such articles of a highly sensitive nature should be stopped for inspection at intervals of not to exceed 50 miles, provided any car in the train containing articles of this nature is loaded in excess of 65 per cent of its marked capacity.

Engines running light on descending grades must stop for inspection at freight train inspection points.

Freight trains must be inspected at each water stop. When conditions are favorable, and in the judgment of conductor and engineer it is safe to do so, and when additional stops can thereby be avoided, freight trains may run between water stops without stopping for inspection, provided the distance is not over 60 miles, except freight trains and light engines may run between Tucson and Maricopa, and between Aztec and Yuma, for inspection. This does not relieve trainmen, however, from making inspection when stops permit, or whenever it is necessary in the judgment of conductor or engineer. On branch lines distance of 40 miles must not be exceeded, and on descending grade must stop at Cutter on Globe Branch.

Mixed trains, including military trains, made up in part of freight cars equipped with cast iron wheels, shall be required to comply with rules and time-table instructions applying to freight trains as they relate to stopping for train inspection, likewise speed restrictions.

METHOD OF DISPATCHING TRAINS BETWEEN TUCSON AND MESCAL

Rule D-97 (A) will apply on Tracks No. 1 and No. 2 between Tucson and Mescal, except that extra trains must obtain clearance, or proper train-order signal, or permission from train dispatcher before using either track.

Limits of double track operation will be as follows:

Eastward.......Via track No. 2 to switch of west end crossover between tracks No. 2 and No. 1 at Mescal.

Westward......Via west end crossover between tracks No. 2 and No. 1 at Mescal and track No. 1 from west switch of crossover to Tucson.

Trains from Bowie Subdivision moving to Mescal Subdivision, and trains on Mescal Subdivision moving through Mescal, with the same conductor and engineer operating through Mescal, may be issued train orders on one subdivision that affect their movements on either, or both subdivisions. Any such train orders issued by one division to a train on the other division must be transmitted to the other division addressed to Dispatcher before complete is given to the order addressed to the train; and such orders must be shown on clearance issued by the division on which train originates.

RULE 83 (B). When a regular train is checked on Bowie or Mescal Subdivision, it will not be necessary to check the register at Mescal against the same train.

RULE 83 (D). Westward trains may leave Mescal without clearance provided train is properly cleared by train-order signal.

RULE 206 (A). Regular trains and sections of schedules authorized on Bowie or Mescal Subdivisions are authorized to assume corresponding schedules or sections of schedules on Bowie or Mescal Subdivisions at Mescal without clearance.

AIR BRAKE RULES

RULE 24. Freight trains may pass

Mescal, Eastward
Estrella, Dragoon and Steins, Westward
Pinal, Eastward and Westward

without stopping for purpose of rear end air test if proceed signal is given from rear by trainmen, after complying with Air Brake Rule 4, and air gage indicates required air brake pressure. Speed approaching summit must not exceed 15 MPH.

If proceed signal is not given or received, train must stop and rear end air test be made.

RULE 33. Retainers will be used on grades of 1.4% to 1.5% on freight trains of less than 110 M's per operative brake when necessary in the judgment of conductor and engineer.

On freight trains averaging 110 M's and over on grades of 1.4% to 1.5% and on all freight trains on grades of 1.5% and over, retainers will be used as follows:

Mescal to Benson	1.4%	grade, One Retainer for each	150 M's
Steins to Mondel	1.4%	" " " " "	150 M's
Steins to Bawtry	1.4%	" " " " "	150 M's
Sibyl to Benson	1.4%	" " " " "	150 M's
Pinal to Globe	2%	" " " " "	120 M's
Globe to Burch	2%	" " " " "	120 M's
Live Oak to Miami	3%	" " " " "	100 M's
Miami to Burch	1.4%	" " " " "	150 M's
Pinal to Cutter	2.2%	" " " " "	120 M's

When retainers are used, stops will be made for inspection and to permit heat of wheels to equalize, as follows:

Eastward: Chamiso
Westward: Fenner
Vanar

RULE 38. Gila—When engine crew and/or train crew is changed on passenger trains, but engine is not changed and no angle cock has been closed except for detaching cars on the rear, rear-end air brake test will be made as follows:

On a passenger train after the brake pipe has been charged to standard pressure, the engineer will apply the brakes with a 10-pound reduction, then signal the trainmen by one sound of the whistle. The angle cock on the rear of the train will then be opened gently, allowing only enough air to escape to cause brake pipe gage hand in cab to fall without making an emergency application, and then closed. When the engineer notes the hand falling he will answer with two sounds of the whistle. The trainman will immediately signal by four sounds of the communicating signal to release the brakes. Engineer will then release the brakes by placing the automatic brake valve handle in release until brake pipe is charged to not less than 5 pounds below standard pressure, slowly return it to running position, then wait until brake pipe pressure has settled and make one short release by moving the handle momentarily to release and back to running position.

This test to be followed by running test in accordance with Rule 39 as soon as speed permits after starting train.

Rule 39.—Running air-brake test not required of eastward passenger trains approaching Crossing—AT&SF Wye.

Incoming passenger enginemen will leave automatic air brakes set on trains at Tucson, Phoenix and Yuma after final stop has been made.

Outgoing enginemen will release brakes on signal from carmen, this signal to be given only after all switching has been done.

SPEED RESTRICTIONS

Following engines are cross counter-balanced and are permitted a maximum speed of 75 MPH:

All GS-1, 2, 3, 4, 5. Mt-1, 2, 3, 4, 5. P-12.

P-7, 8, 10; 2461, 2462, 2463, 2464, 2465, 2466, 2467, 2468, 2469, 2471, 2472, 2473, 2474, 2475, 2476, 2478, 2479, 2480, 2481, 2482, 2483, 2484, 2485, 2486, 2487, 2488, 2489, 2490, 2491.

Following engines are cross counter-balanced and are permitted a maximum speed of 55 MPH when handling passenger trains:

F-1, 3, 4, 5; 3612, 3619, 3625, 3634, 3636, 3652, 3656, 3658, 3665, 3666, 3676, 3677, 3681, 3682, 3685, 3687, 3692, 3706, 3709, 3711, 3716, 3717, 3727, 3728, 3732, 3737, 3742, 3752, 3765.

All AC-4, 5, 7, 8, 9, 10.

Maximum speed at which engines backing may be operated is 30 MPH, except must not exceed 15 MPH on curves and approaching grade crossings.

Speed restrictions for engines are shown in speed restriction table; however, attention is called to the following maximum speeds at which tenders may be operated.

Tenders having water capacity 7,000 gallons or less, except Classes 70-R-1 and 70-SC-1, maximum speed 50 MPH.

Tenders having water capacity in excess of 7,000 gallons, and including Classes 70-R-1 and 70-SC-1, maximum speed of engines.

Maximum speed of disabled engines hauled in train, or running under own steam, must not exceed:

When pilot removed....................20 MPH
When main rod only removed....................30 MPH
When side rods only removed....................30 MPH
When both main and side rods removed....................20 MPH
When hauled in train and all rods are on....................30 MPH
SP1, 2 and 3 when inside main rod removed or inoperative......30 MPH
S and SE engines, and all other classes of engines when not equipped with engine trucks....................20 MPH

When all weight has been removed from any one pair of drivers on an engine, speed must not exceed 20 MPH.

When all weight has been removed from one wheel of any pair drivers on an engine, speed must not exceed 30 MPH.

Engines operated coupled tender to tender must not exceed speed permitted same engines running backwards.

When an engine has broken main axle and is in condition to be moved, engine should be detached from train and run light to next siding, not exceeding eight miles per hour.

If unable to place engine on siding, then it should be left between switches of siding on main track and proper protection provided.

Trains with passenger equipment handling steel-wheel box cars, commonly known as PMT cars or foreign line steel-wheel box cars equipped for movement in passenger trains or trains consisting wholly of steel-wheel box cars, except those equipped with high speed trucks, must not exceed 60 MPH.

Wooden passenger-carrying cars, wooden baggage, express and other head end cars, unless equipped with steel center sills and steel platforms must not be used in passenger trains. Speed of trains handling such cars restricted to 40 MPH.

If consist of train includes both wooden and steel passenger-carrying cars, the wooden cars must be kept together and handled on rear.

Kennecott Copper Corp'n R. R. between Hayden Jct. and Hayden Mills is operated by the Tucson Division.

Speed of trains must not exceed 15 MPH.
Grade Hayden Mills to Hayden Jct. 2.2%.
Impaired overhead and side clearance at Hayden Mills Smelter.

(Unless otherwise further restricted by time table, slow board, or train order)

PAGE	TYPE OF ENGINE—TERRITORY—STRUCTURE—LADING, ETC.	M.P.H.
	Trains handling wooden pile-drivers; locomotive cranes with boom disconnected and heavy end forward; steam shovels and ditchers, transported on their own wheels;	
2-3-4	On tangent main tracks....................	35
5-7	except SPMW 4044....................	25
4-5-6	On tangent branch tracks....................	25
All	On all curves....5 MPH less than speed authorized. Where slow boards in place 5 MPH less than shown on slow boards, except when speed indicated is 15 MPH or less be governed by slow boards.	
	Trains handling locomotive cranes with boom disconnected and light end forward (must not be handled in this manner except in emergency):	
2-3-4-5-7	On tangent main tracks....................	20
All	On curves and on branch tracks....................	15
	Trains handling locomotive cranes with boom in place, either end forward (to be handled in work trains when practicable):	
2-3-4-5-7	On tangent main tracks....................	25
All	On curves and on branch tracks....................	15
All	Trains handling steel pile-drivers may make maximum freight train speed.	
	Trains handling relief outfit with steam derrick:	
2-3-4-5-7	On tangent main tracks....................	35
4-5-6	On tangent branch tracks....................	25
All	On all curves.....5 MPH less than speed authorized. Where slow boards in place 5 MPH less than shown on slow boards, except where speed indicated is 15 MPH or less be governed by slow boards.	

SPEED OF TRAINS REGULATED BY ORDINANCES THROUGH CITY LIMITS

PAGE	STATION	MPH
2	Yuma over street crossings....................	5
3	Tempe....................	20
3	Chandler....................	20
5	Casa Grande....................	40
6	Nogales....................	20
6	Safford....................	15
6	Pima....................	25
7	Willcox....................	40

SPEED RESTRICTIONS

Maximum speed of passenger trains must not exceed 50 MPH and freight and mixed trains 35 MPH except as otherwise provided for herein, or by bulletin, train order or "fixed signal."

Pages	TERRITORY	PASSENGER				FREIGHT			LT. ENGINES RUNNING F'WD.		
		Maximum	M 4, 6, 9, 11 Mk 5, 6, 7 8, 9	Mk 2, 4 F 1, 3, 4, 5 AC 7, 8, 10 SP 1, 2, 3	C 8, 9, 10	Freight and Mixed Maximum	Engines Backing	Switch Engines S-SE	P 1, 3, 5, 12 Mt 1, 2, 3, 4, 5 GS 1, 2, 3, 4, 5	M 4, 6, 9, 11 T 37 C 8, 9, 10 Mk 5, 6, 7, 8, 9 F 1, 3, 4, 5 SP 1, 2, 3	Mk 2, 4 AC 7, 8, 10
	Through interlocking limits with caution.										
	Through crossovers, turnouts except where otherwise specified	15	15	15	15	15	15	15	15	15	15
2	Yuma yard, west and east switches....................	15	15	15	15	15	15	15	15	15	15
2	Yuma, east switch - End of double track, East Yard....................	60	50	40	45	40	30	20	45	35	30
2	East Yard, end of double track - M.P. 745....................	65	50	40	45	40	30	20	45	35	30
2	M.P. 745 - 748.58....................	60	50	40	45	40	30	20	45	35	30
2	M.P. 748.58 - 755.12....................	30	30	30	30	30	30	20	30	30	30
2	M.P. 755.12 - 762.88....................	50	50	40	45	35	30	20	45	35	30
2	M.P. 762.88 - Wellton, west interlocking limit....................	60	50	40	45	40	30	20	45	35	30
2	Wellton, west interlocking limit - M.P. 766 (Westward track).	50	50	40	45	35	30	20	45	35	30
2	Wellton, east crossovers....................	25	25	25	25	20	20	20	20	20	20
2	Wellton, east frogs....................	35	35	35	35	35	30	20	35	35	30
2	Wellton, east interlocking limit - M.P. 776.36....................	60	50	40	45	40	30	20	45	35	30
2	M.P. 776.36 - 777.78....................	50	50	40	45	35	30	20	45	35	30
2	M.P. 777.78 - 845.94....................	60	50	40	45	40	30	20	45	35	30
2	M.P. 845.94 - 847.28....................	50	50	40	45	35	30	20	45	35	30
2	M.P. 847.28 - 887.42....................	60	50	40	45	40	30	20	45	35	30
2	M.P. 887.42 - 887.61....................	50	50	40	45	35	30	20	45	35	30
2	M.P. 887.61 - 890.53....................	60	50	40	45	40	30	20	45	35	30
4	Litchfield Branch....................	20	20	20	20	20	15	20	20	20	20
2	M.P. 890.53 - 890.78....................	50	50	40	45	35	30	20	45	35	30
2	M.P. 890.78 - 893.54....................	60	50	40	45	40	30	20	45	35	30
2	M.P. 893.54 - 894.48....................	50	50	40	45	35	30	20	45	35	30
2	M.P. 894.48 - Phoenix, Signal 9048....................	60	50	40	45	40	30	20	45	35	30
2, 3	Phoenix, Signal 9048 - M.P. 907.90....................	20	20	20	20	20	20	20	20	20	20
3	Phoenix Yard Limit - Kendall (second main track)....................	25	25	25	25	25	25	20	25	25	25
3	Phoenix, M.P. 907.90 - 912.74....................	60	50	40	45	40	30	20	45	35	30
3	M.P. 912.74 - 913.12....................	40	40	40	40	30	30	20	40	35	30
3	M.P. 913.12 - 913.77....................	50	50	40	45	35	30	20	45	35	30
3	M.P. 913.77 - Tempe, west City Limit....................	20	20	20	20	20	20	20	20	20	20
6	Creamery Branch....................	20	20	20	20	20	20	20	20	20	20
3	Tempe, east City Limit - M.P. 915.79....................	40	40	40	40	25	25	20	40	25	25
6	Tempe Branch....................	20	20	20	20	20	20	20	20	20	20
3	M.P. 915.79 - 920.86....................	60	50	40	45	40	30	20	45	35	30
3	M.P. 920.86 - Mesa, west switch....................	40	40	40	40	25	25	20	40	25	25
3	Mesa yard, west switch - east City Limit (except curve M.P. 922)	20	20	20	20	20	20	20	20	20	20
3	Mesa Curve M.P. 922....................	10	10	10	10	10	10	10	10	10	10
3	Mesa, east City Limit - M.P. 924.12....................	60	50	40	45	40	30	20	45	35	30
3	M.P. 924.12 - 927.69....................	50	50	40	45	35	30	20	45	35	30
3	M.P. 927.69 - Chandler, west City Limit....................	60	50	40	45	40	30	20	45	35	30
3	Chandler, east City Limit - M.P. 945.49....................	60	50	40	45	40	30	20	45	35	30
3	M.P. 945.49 - 946.78....................	50	50	40	45	35	30	20	45	35	30
3	M.P. 946.78 - Picacho, west wye switch....................	60	50	40	45	40	30	20	45	35	30
3	Picacho, west wye switch - Crossover....................	30	30	30	30	30	30	20	30	30	30
3	Picacho crossover....................	25	25	25	25	20	20	20	20	20	20
3	Picacho crossover - M.P. 938....................	60	50	40	45	40	30	20	45	35	30
3	M.P. 938 - 979.7....................	65	50	40	45	40	30	20	45	35	30
3	M.P. 979.7 - Signal 9828....................	50	50	40	45	35	30	20	45	35	30
3, 7	Tucson yard, Signal 9828 - M.P. 985....................	20	20	20	20	20	20	20	20	20	20

SPEED RESTRICTIONS—(Continued)

Maximum speed of passenger trains must not exceed 50 MPH and freight and mixed trains 35 MPH except as otherwise provided for herein, or by bulletin, train order or "fixed signal".

		PASSENGER				FREIGHT			LT. ENGINES RUNNING F'WD.		
Pages	TERRITORY	Maximum	M 4, 6, 9, 11 Mk 5, 6, 7 8, 9	Mk 2, 4 F 1, 3, 4, 5 AC 7, 8, 10 SP 1, 2, 3	C 8, 9, 10	Freight and Mixed Maximum	Engines Backing	Switch Engines S-SE	P 1, 3, 5, 12 Mt 1, 2, 3, 4, 5, GS 1, 2, 3, 4, 5	M 4, 6, 9, 11 T 37 C 8, 9, 10 Mk 5, 6, 7, 8, 9 F 1, 3, 4, 5 SP 1, 2, 3	Mk 2, 4 AC 7, 8, 10
4	Wellton, east crossovers	25	25	25	25	20	20	20	20	20	20
4	Wellton, east frogs	35	35	35	35	35	30	20	35	35	30
4	Wellton, east interlocking limit - M.P. 772.06	50	50	40	45	35	30	20	45	35	30
4	M.P. 772.06 - 772.78	60	50	40	45	40	30	20	45	35	30
4	M.P. 772.78 - 792.50	65	50	40	45	40	30	20	45	35	30
4	M.P. 792.50 - 794.03	30	30	30	30	30	30	20	30	30	30
4	M.P. 794.03 - 795	50	50	40	45	35	30	20	45	35	30
4	M.P. 795- 800	65	50	40	45	40	30	20	45	35	30
4	M.P. 800 - 813	50	50	40	45	35	30	20	45	35	30
4	M.P. 813 - 817	65	50	40	45	40	30	20	45	35	30
4	M.P. 817 - 823.61	50	50	40	45	35	30	20	45	35	30
4	M.P. 823.61 - 825.18	30	30	30	30	30	30	20	30	30	30
4	M.P. 825.18 - Gila, west switch	65	50	40	45	40	30	20	45	35	30
4-5	Gila yard, west and east switches	30	30	30	30	30	30	20	30	30	30
5	Gila, east switch - M.P. 866.98	65	50	40	45	40	30	20	45	35	30
5	M.P. 866.98 - 867.85	50	50	40	45	35	30	20	45	35	30
5	M.P. 867.85 - 870.12	30	30	30	30	30	30	20	30	30	30
5	M.P. 870.12 - 874.48	50	50	40	45	35	30	20	45	35	30
5	M.P. 874.48 - 886.36	65	50	40	45	40	30	20	45	35	30
5	M.P. 886.36 - 898	50	50	40	45	35	30	20	45	35	30
5	M.P. 898 - 902	65	50	40	45	40	30	20	45	35	30
5	M.P. 902 - Casa Grande, west City Limit	60	50	40	45	40	30	20	45	35	30
5	Casa Grande, east City Limit - Picacho	60	50	40	45	40	30	20	45	35	30
7	Tucson yard, Track No. 1, signals 9883 - 9851					20	20	20	20	20	20
7	Tucson, M.P. 985 - 991	50	50	40	45	35	30	20	45	35	30
7	M.P. 991 - 997	65	50	40	45	40	30	20	45	35	30
7	M.P. 997 - 1004.27	50	50	40	45	35	30	20	45	35	30
7	M.P. 1004.27 - 1010.36	30	30	30	30	25	25	20	25	25	25
7	M.P. 1010.36 - 1012.62	50	50	40	45	35	30	20	45	35	30
7	M.P. 1012.62 - 1014	30	30	30	30	25	25	20	25	25	25
7	M.P. 1014 - 1016.77	50	50	40	45	35	30	20	45	35	30
7	M.P. 1016.77 - 1018.08	30	30	30	30	25	25	20	25	25	25
7	M.P. 1018.08 - Mescal, west interlocking limit	40	40	40	40	30	30	20	40	30	30
7	Mescal interlocking plant, through crossovers to R.G.Div.	25	25	25	25	25	25	20	25	25	25
7	Mescal, east interlocking limit - M.P. 1026	50	50	40	45	35	30	20	45	35	30
7	M.P. 1026 - 1029	65	50	40	45	40	30	20	45	35	30
7	M.P. 1029 - 1030.86	50	50	40	45	35	30	20	45	35	30
7	M.P. 1030.86 - Benson, west switch	40	40	40	40	30	30	20	40	30	30
7	Benson yard, west and east switches	30	30	30	30	30	30	20	30	30	30
7	Benson, east switch - M.P. 1036.96	50	50	40	45	35	30	20	45	35	30
7	M.P. 1036.96 - 1040.78 *(See foot note)	28	28	28	28	25	25	20	25	25	25
7	M.P. 1040.78 - 1044.50	45	45	40	45	30	30	20	45	30	30
7	M.P. 1044.50 - 1045.14 *(See foot note)	28	28	28	28	25	25	20	25	25	25
7	M.P. 1045.14 - 1052.36	40	40	40	40	30	30	20	40	30	30
7	M.P. 1052.36 - 1058	50	50	40	45	35	30	20	45	35	30
7	M.P. 1058 - Willcox, west City Limit	65	50	40	45	40	30	20	45	35	30
7	Willcox, east City Limit - M.P. 1076	60	50	40	45	40	30	20	45	35	30
7	M.P. 1076 - 1080	65	50	40	45	40	30	20	45	35	30
7	M.P. 1080 - 1084.42	60	50	40	45	40	30	20	45	35	30
7	M.P. 1084.42 - 1094.62	50	50	40	45	35	30	20	45	35	30
7	M.P. 1094.62 - Bowie, west switch	60	50	40	45	40	30	20	45	35	30
7	Bowie yard, west and east switches	30	30	30	30	30	30	20	30	30	30
7	Bowie, east switch - M.P. 1121	65	50	40	45	40	30	20	45	35	30
7	M.P. 1121 - 1122.51	50	50	40	45	35	30	20	45	35	30
7	M.P. 1122.51 - 1122.60	40	40	40	40	30	30	20	40	30	30
7	M.P. 1122.60 - 1124.44	50	50	40	45	35	30	20	45	35	30
7	M.P. 1124.44 - 1128.68	30	30	30	30	25	25	20	25	25	25
7	M.P. 1128.68 - Lordsburg	50	50	40	45	35	30	20	45	35	30

		PASSENGER		FREIGHT		LIGHT ENGINES RUNNING FORWARD	
Page	TERRITORY	Maximum	Gas-Electric M 4, 6, 9, 11 T-37 C 8, 9, 10 Mk 2, 4, 5, 6, 7, 8, 9	Freight and Mixed Maximum	Switch Engines S-SE and Engines Backing	M 4, 6, 9, 11 T-37 C 8, 9, 10 Mk 5, 6, 7, 8, 9	Mk 2, 4
5	Christmas Branch, except	40		30			
5	M.P. 923.89 - 924.08	35	35	25	20	35	30
5	M.P. 924.08 - 955.93	40	40	30	20	35	30
5	M.P. 955.93 - 956.07	35	35	25	20	35	30
5	M.P. 956.07 - 964.28	40	40	30	20	35	30
5	M.P. 964.28 - 964.54	30	30	20	20	30	30
5	M.P. 964.54 - 968.79	40	40	30	20	35	30
5	M.P. 968.79 - 972.07	30	30	30	20	30	30
5	M.P. 972.07 - 972.15	15	15	15	15	15	15
5	M.P. 972.15 - 974.12	30	30	25	20	30	30
5	M.P. 974.12 - 974.20	15	15	15	15	15	15
5	M.P. 974.20 - 975.34	30	30	30	20	30	30
5	M.P. 975.34 - 975.48	15	15	15	15	15	15
5	M.P. 975.48 - 976.21	30	30	30	20	30	30
5	M.P. 976.21 - 976.36	20	20	20	20	20	20
5	M.P. 976.36 - 980.35	30	30	25	20	30	30
5	M.P. 980.35 - 980.41	15	15	15	15	15	15
5	M.P. 980.41 - 980.97	30	30	25	20	30	30
5	M.P. 980.97 - 981.03	25	25	25	20	25	25
5	M.P. 981.03 - 981.70	30	30	30	20	30	30
5	M.P. 981.70 - 981.78	25	25	25	20	25	25
5	M.P. 981.78 - 983.27	30	30	25	20	30	30
5	M.P. 983.27 - 987.43	25	25	25	20	25	25
5	Ray Jct. yard, M.P. 987.43 - 988.24	15	15	15	15	15	15
5	M.P. 988.24 - 999.53	30	30	25	20	30	30
5	Hayden Jct. yard, M.P. 999.53 - 1000.64	15	15	15	15	15	15
5	M.P. 1000.64 - Winkelman	30	30	25	20	30	30
5	Winkelman - Christmas	15	15	15	15	15	15
6	Nogales Branch, except	35		25			
6	Tucson yd. M.P. 984 - 986.88	20	20	20	20	20	20
6	M.P. 986.88 - Nogales	35	35	25	20	25	25
6	Nogales yard limits	20	20	20	20	20	20

		Gas-Electric	M-6 T-37	C 8, 9, 10				
6	Globe Branch, except	40	35	30	30			
6	Bowie yard limits	30	30	30	30	20	30	30
6	Bowie east yard limit - M.P. 1126.12	40	35	30	30	20	30	25
6	M.P. 1126.12 - 1126.43	30	30	30	30	20	30	25
6	M.P. 1126.43 - Safford west yard limit	40	35	30	30	20	30	25
6	Safford yard limits	15	15	15	15	15	15	15
6	Safford east yard limit - Pima west city limit	40	35	30	30	20	30	25
6	Pima east city limit - M.P. 1178.03	40	35	30	30	20	30	25
6	M.P. 1178.03 - 1178.17	30	30	30	25	20	30	25
6	M.P. 1178.17 - 1183.7	40	35	30	30	20	30	25
6	M.P. 1183.7 - 1195	30	30	30	20	20	20	20
6	M.P. 1195 - 1207.01	30	30	30	25	20	30	25
6	M.P. 1207.01 - 1217.52	40	35	30	30	20	30	25
6	M.P. 1217.52 - 1218.78	30	30	30	25	20	30	25
6	M.P. 1218.78 - 1220.59	40	35	30	30	20	30	25
6	Globe yard limits, except	15	15	15	15	15	15	15
	Broad St. Crossing	6	6	6	6	6	6	6
6	M.P. 1223.09 - 1231.18	20	20	20	20	15	20	20
6	Miami yard limits	15	15	15	15	15	15	15
6	Inspiration Jct. - Live Oak	10	10	10	10	10	10	10

***Passenger trains handled by Mt 1-2-3-4-5 class engines maximum speed 30 M.P.H.**

SPECIAL INSTRUCTIONS

MISCELLANEOUS

1. At Wellton, Aztec, Sentinel, Gila, Casa Grande, Florence, Hayden Jct., Benson, and San Simon, water for engine purposes is treated and must not be taken for domestic use except as follows:

Aztec, water rack, or by closing valve between treater and water column.

Sentinel, water rack and east water column.

Hayden Jct., by closing valve between treater and water column.

Benson, either of the two columns at station, by first opening switch in box on outside of freight house.

When filling water cars for domestic purposes at Hayden Jct. and Benson, after closing valve between treater and water column, fill engine tank to drain line of treated water before filling water cars.

At Aztec, westward freight trains take water when possible and take water at Sentinel only when it will avoid delay west of there.

At Sentinel, eastward freight trains take water and fill water car, and take water at Aztec only when necessary or when it will avoid delay at Sentinel.

At Saddle, emergency water station, take only enough water to reach next water station.

At Maricopa, eastward and westward freight trains take water, and if necessary, fill water car.

At Benson, when business is heavy, westward freight trains, including light engines, take water at columns at station, to avoid shortage in east tank.

At Sibyl, westward identified and other important freight trains may take water if it will avoid stopping at Benson. Other freight trains will not take water except in case of emergency, and then only sufficient to reach next water station.

In all cases where it is necessary to make a short move with heavy freight train to reach water or oil column, including that required to spot second engine of double-headed train, engine must be cut off before spotting at column.

4. One helper as restricted Par. 4(b) and 4(g) may be placed behind caboose if of steel underframe construction and cars ahead of caboose are not rear end cars; helper placed ahead of caboose must be ahead of rear end cars.

Road engines double-heading or helper engine may be placed on head end of freight train when tonnage handled does not exceed 75 per cent of the total rating of both engines.

In helper service:

(a) No helper engine will be placed behind wooden underframe cars or cabooses.
(b) Engines weighing more than 235,000 pounds on the drivers will not be placed behind steel underframe cabooses.
(c) In no case will more than one helper engine be placed behind steel underframe cabooses.
(d) When helper engines are used in rear of freight trains, consolidation and lighter class must be placed behind heavier class.
(e) Engines must not be cut off or coupled to a train while same is in motion.

For the purpose of pushing trains out of yards:

(f) No engine will be placed behind wooden underframe caboose or other wooden frame equipment.
(g) Engines weighing more than 235,000 pounds on the drivers will not be placed behind steel underframe cabooses.
(h) Air will not be coupled through pusher engine.
(i) Yard engines regularly so used will be equipped with Russell-Jordan device to hold the coupler pin from dropping, thus making it unnecessary for employes to uncouple the pusher engine when cutting off.
(j) In no case shall the knuckle be removed, or closed, or uncoupling lever temporarily fastened in release position on a pusher engine, as means of preventing coupling being made.
(k) Unless local conditions require, it will not be necessary to stop trains to detach pusher engines.

5. At Litchfield, gate at entrance Airplane Spur is locked with Government lock, and to gain entrance it will be necessary for engineer to sound a long and short blast of steam whistle and the watchman on duty will take care of the opening and closing of the gate.

At Litchfield Park, Boswell Spur is protected by gate, which must be kept closed and locked when not in use.

At Tovrea, entrance to Tovrea Packing Co. plant is protected by gates, which must be kept closed and locked when not in use. Look out for rubbish and material alongside tracks around plant.

Chute across the ice track at packing plant, located one-half car length south of bumper.

This chute when in normal position, will extend across and about two feet above a car, but will not clear a man on top of car.

When in use will be in slanting position from the second floor of Tovrea plant to auto truck backed across ice track, and when so in use, cars cannot be shoved to bumper.

At Hayden, entrance to Kennecott Copper Corp'n plant is protected by gate, which must be closed and locked at night.

At Coolidge, cars must not be detached in motion to Indian Service spur. Gate at entrance must be kept closed and locked when not in use.

At Tucson, P. F. E. yard, look out for ice and rubbish alongside P. F. E. tracks.

At Willcox, look out for bedding sand between tracks 2 and 3.

7. Capacity of sidings between clearance points is based on an average car length of 49 feet not including engines and caboose.

Figures between station names on schedule pages indicate distance between initial switches.

Letter "E" precedes distance for eastward trains and "W" for westward trains.

75 car lengths from siding switch, nearest telegraph or signal pole on engineers' side of departing trains, are painted with 3 white stripes.

10. ENGINES HEAVIER THAN THOSE SHOWN MUST NOT OPERATE ON FOLLOWING LINES OR TRACKS.

Mk 7, 8 & 9 CLASS

Creamery Branch.
Tempe Branch sidings and spurs.
Christmas Branch.

Mk 2, 4, 5 & 6 CLASS

Tempe..............Tempe Milling Co., Phoenix Mill and gravel pit spurs.
Tracks 2 and 3.
Mesa..............McKellips, Standard Oil, and Texas Oil spurs.
Shell Oil and Independent Cotton & Oil Co. spurs.
Mutual Cotton Oil spur.
Union Oil Co. spur.
Mesa Milling Co. spur.
Nogales Branch.
Globe Branch.

C 8, 9, 10 & P CLASS

Heaton..............Spur.
Kendall..............River track east of spur.
Creamery Branch....Siding.
Creamery..............Track east of Creamery plant.
Mesa..............Drew's spur (Must back in).
Magma..............Spur.
Christmas Branch....Between Winkelman and Christmas.

Engines must not use:

Spurs: Buckeye, Seaside Oil Co.; Florence; Burns; Wymola.

Between Price and Christmas look out for rock and land slides.

Between MP 1184 and MP 1196, Globe Branch, look out for rock and land slides.

11. At Phoenix freight trains will use freight lead between Signal P-9052 and west end of double track.

At Phoenix, Santa Fe and Southern Pacific trains may jointly use tracks at east and west end of Union Station. Yard and light engines must take every precaution possible to avoid delaying first-class trains on all tracks within Union Station zone. Trains will approach switch at entrance to Union Station tracks prepared to stop and will proceed only when track is known to be clear.

At Bowie, No. 5 track in west yard must be kept clear for through movement.

15. At Yuma, eastward freight trains must not pass Signal 7328 and westward trains, except first-class must not pass Signal 7341 without receiving proceed signal from yardman, using white flag by day and green light by night.

At Tucson, westward freight trains must not pass Signal 9875 or first crossover switch west of Signal 9851 without proceed signal from yardman, using white flag by day and green light by night.

Eastward freight trains, before entering train yard, after passing Sixth Avenue interlocking plant, must receive proceed signal from yardman, using white flag by day and green light by night.

Westward trains must not pass east crossover switch opposite light Signal 9838 located just east of Tucson yard office, without proceed signal from yardman, unless this switch is lined for movement on Passenger track No. 1.

20. All cars handled in passenger trains must be equipped with steel-tired or all-steel wheels.

Head-end passenger cars so constructed or loaded as to prevent trainmen passing through must not be handled on rear of any passenger train. Freight cars must not be handled behind any car carrying passengers. The term "freight" does not include a baggage, express, or mail car, or a caboose.

When necessary to handle passenger equipment, except official cars in freight trains, it must be placed next to caboose, provided rear-end freight cars in train will permit.

25. Electric lanterns may be used for displaying white light only, except may be used by herders for displaying green lights.

LOCATION OF OVERHEAD AND SIDE STRUCTURES NOT STANDARD CLEARANCE

Employes are warned that it is dangerous to ride on top or sides of cars while passing these points and that they must protect themselves from injury.

Bulletins may be issued from time to time referring to impaired clearances not listed below.

MILE POST	DESCRIPTION
733.0	Yuma, ice platform.....Side
778.0	Gila River bridge.....Side
891.0	Agua Fria River bridge.....Side
907.0	Phoenix, ice platform.....Side
911.8	Tovrea, meat chute.....Overhead
913.4	Tempe, Water User's spur.....Overhead and Side
914.0	Salt River bridge.....Side
914.4	Tempe, Tempe Milling Co. spur.....Side
921.8	Mesa, Texas Oil Co., Drew's spur and ice platform.....Side
959.3	Gila River bridge.....Side
972.4	Tunnel No. 1 (Christmas Branch).....Overhead and Side
972.5	Gila River bridge (Christmas Branch).....Side
975.4	Rock cut (Christmas Branch).....Side
985.3	Gila River bridge (Christmas Branch).....Side
987.8	Ray Junction, water tank spout.....Overhead and Side
988.5	Tunnel No. 2 (Christmas Branch).....Overhead and Side
990.0	Tunnel No. 3 (Christmas Branch).....Overhead and Side
1003.5	Winkelman, ore bins.....Side
1007.0	Finney, ore chute.....Side
1009.2	Tunnel No. 4 (Christmas Branch).....Overhead and Side
984.2	Tucson, ice platform.....Side
1029.6	Tubac, water tank spout.....Overhead and Side
1049.8	Nogales, ice platform.....Side
1008.1	Cienega Creek bridge.....Side
1033.6	San Pedro River bridge.....Side
1114.2	San Simon, water tank spout.....Overhead and Side
1201.0	San Carlos, water tank and spout.....Overhead and Side

SURGEONS

LOCATION	NAME	TITLE
San Francisco	Dr. C. A. Walker	Chief Surgeon and Manager
Yuma	Dr. W. A. Phillips	District Examiner and Surgeon
Yuma	Dr. C. W. Cain	Asst. District Surgeon
Yuma	Dr. J. H. Sturges	Oculist
Buckeye	Dr. G. C. Rubel	District Surgeon
Litchfield	Dr. R. L. Penn	District Surgeon
Phoenix	Dr. A. M. Tuthill	District Examiner and Surgeon
Phoenix	Dr. J. E. Drane	Asst. District Surgeon
Phoenix	Dr. N. A. Ross	Asst. District Surgeon
Phoenix	Dr. R. H. Stevens	Asst. District Surgeon
Phoenix	Dr. D. F. Harbridge	Oculist
Phoenix	Dr. W. A. Schwartz	Aurist
Phoenix	Dr. R. F. Palmer	Consulting Physician and Surgeon
Tempe	Dr. R. J. Stroud	District Surgeon
Mesa	Dr. W. S. Sharp	District Surgeon
Chandler	Dr. J. M. Meason	District Surgeon
Coolidge	Dr. H. E. Pinkerton	Emergency Surgeon
Coolidge	Dr. G. S. Walker	Emergency Surgeon
Gilbert	Dr. L. M. Tompkins	Emergency Surgeon
Florence	Dr. G. E. Huffman	District Surgeon
Ray	Dr. O. E. Utzinger	District Surgeon
Hayden	Dr. C. B. Huestis	District Surgeon
Gila	Dr. L. A. Love	District Examiner and Surgeon
Casa Grande	Dr. J. E. Redden	District Surgeon
Tucson	Dr. C. A. Thomas	Assistant to Chief Surgeon and Exam.
Tucson	Dr. S. Sanger	District Surgeon
Tucson	Dr. V. G. Presson	Acting Division Surgeon
Tucson	Dr. R. A. Wilson	Acting Division Surgeon
Tucson	Dr. E. H. Brown	Aurist and Oculist
Tucson	Dr. T. H. Cates	Consulting Aurist and Oculist
Nogales	Dr. J. S. Gonzales	District Examiner and Surgeon
Nogales	Dr. C. S. Smith	Oculist and Aurist
Nogales	Dr. Z. B. Noon	District Surgeon
Benson	Dr. A. N. Shoun	District Examiner and Surgeon
Willcox	Dr. J. C. Wilson	District Surgeon
Willcox	Dr. B. E. Briscoe	District Surgeon
Bowie	Dr. F. W. Parrish	District Examiner and Surgeon
Lordsburg	Dr. C. B. Austin	District Surgeon
Safford	Dr. J. N. Stratton	District Surgeon
Safford	Dr. F. W. Butler	Asst. District Surgeon
San Carlos	Dr. J. I. Sackler	District Surgeon
Globe	Dr. C. Gunter	District Examiner and Surgeon
Globe	Dr. W. A. Holt	Consulting Surgeon
Miami	Dr. C. M. Cron	District Surgeon
Miami	Dr. I. E. Harris	Asst. District Surgeon

HOSPITALS

General Hospital..............San Francisco, Calif.
St. Joseph's Hospital..............Phoenix, Ariz.
St. Mary's Hospital..............Tucson, Ariz.

AVERAGE TARE WEIGHTS OF PASSENGER TRAIN CARS

CLASS	NOT AIR-CONDITIONED All-Steel	NOT AIR-CONDITIONED Steel Under-frame	AIR-CONDITIONED All-Steel Cooling Season	AIR-CONDITIONED All-Steel Heating Season
Baggage—60 ft.	93,070	....	....	....
" —66 ft.	127,610	....	....	....
" —70 ft.	122,620	....	....	....
" —70 ft. (With Auto. End Door)	125,800	....	....	....
" —(Dynamo)	98,730	....	....	....
"	....	87,120	....	....
Baggage & Mail—60 ft.	103,620	....	....	....
" " " —69 ft.	124,760	....	....	....
" " " —70 ft.	129,140	....	....	....
" " "	....	103,590	....	....
" " Passenger	108,675	112,640	....	....
Express Refr.—N. P. Ry	....	74,000	....	....
" " —A. R. E. No. 40- 154	....	78,000	....	....
" " — " " 155- 224	....	89,000	....	....
" " — " " 500- 506	....	110,000	....	....
" " — " " 1101-1175	....	85,000	....	....
" " —P. F. E. " 500- 799	....	83,000	....	....
Express, Horse	133,050	....	....	....
Postal	112,120	....	....	....
Postal Storage—40 ft.	74,530	....	....	....
" " —60 ft.	105,120	....	....	....
Assembly (ACW)	....	....	168,950	168,950
Club (ACI)	146,210	122,300	172,200	164,700
Official (NAC)	170,700	155,370	....	....
" ......(ACW) Cars 107-128	....	....	182,800	182,800
" ......(ACW) " 140-141	....	....	195,040	195,040
Chair—60 ft. (ACI)	100,620	....	138,000	132,000
" —72 ft. (ACI)	....	....	165,000	157,800
" —72 ft. (ACW)	....	....	158,700	158,700
" —Streamline—Single (ACS)	....	....	120,900	104,500
" — " —Art (ACS)	....	....	205,400	172,600
" —74 ft. (ACI)	....	....	180,915	173,125
" —74 ft. (ACS)	....	....	197,944	181,600
Coaches—60 ft. (ACI)	98,130	....	136,100	130,100
" —70 ft. (ACI)	137,640	....	157,800	151,000
" —70 ft. (ACW)	137,640	....	151,000	151,000
" —72 ft. (ACI)	....	....	164,500	157,400
" —72 ft. (ACW)	....	....	153,500	153,500
" —73 ft. 6 in. (ACW)	....	....	163,000	163,000
" —73 ft. 6 in. (ACI)	....	....	168,500	161,200
" —72 ft. (Interurban)	120,000	....	....	....
All-Day Lunch—Chair	105,970	....	....	....
" " —Coach	103,875	....	....	....
Cafe-Coach (ACI)	....	138,600	155,700	149,000#
Cafe-Lounge (ACI)	148,950	161,200	173,500	166,000
" (ACW)	....	....	156,000	156,000
Diner —70 ft.	....	135,930	....	....
" —72 ft.	155,330	146,930	....	....
" —77 ft. (Arch Roof)..(ACI)	156,000	....	170,100	162,700
" —77 ft. (" ")..(ACW)	....	....	162,950	162,950
" —77 ft. (Clere Story Roof)..(ACW)	....	165,530	169,450	169,450
" —77 ft. (" " ")..(ACM)	....	....	189,581	173,836
" —79 ft. (NAC)	169,100	....	....	....
" —80 ft. (Clere Story Roof)..(ACM)	....	....	201,323	184,700
Lounge......(" " ")..(ACI)	....	....	189,800	181,630
" ......(Arch Roof)......(ACI)	....	....	167,500	160,300
" ......(" ")......(ACW)	....	....	164,980	157,780
Observation—75 ft. (ACI)	154,400	....	169,185	161,900
" —77 ft (ACI)	....	....	194,543	186,166
"	....	141,870	....	....
Pullman-Observation (ACI)	160,800	153,000	177,314	169,200
" " (ACM)	160,800	153,000	192,300	176,300
" " Lounge (ACM)	171,200	....	194,900	178,900
" " " (ACI)	171,200	....	187,682	179,600
" —Bedroom (ACI)	167,600	....	183,920	176,000
" — " (ACM)	167,600	....	195,800	179,800
" —Sleeper (ACM)	163,100	....	191,100	175,100
" — " (ACI)	163,100	....	180,075	171,500
" —Tourist (ACM)	153,000	....	185,200	169,200
" — " (ACI)	153,000	....	168,663	161,400
Arizona Limited—(7 cars) (ACM)	....	....	1,020,800	980,800
Rail, Gas-Electric—400 H.P.	158,400	....	....	....
" " " —600 H.P.	167,200	....	....	....

#Steel underframe.

CODE:

NAC—Non-Air Conditioned.
ACI —Air-Conditioned—Ice.
ACM—Air-Conditioned—Mechanical.
ACW—Air-Conditioned—Waukesha.
ACS —Air-Conditioned—Steam Ejector

RATING OF ENGINES—TUCSON DIVISION

IN M'S OF 1,000 LBS. BACK OF TENDER

Nominal Class	OFFICIAL CLASS	ENGINE NUMBERS	Boiler Pressure	Yuma to East Yard Pembroke to Mohawk Lava to Sentinel	East Yard to Pembroke Mohawk to Lava Sentinel to Gila Maricopa to Tucson Wellton to Saddle 2 M. W. of Gillespie to Picacho	Gila to Estrella Saddle to 2 M. W. of Gillespie	Estrella to Maricopa Tucson to Maricopa Estrella to Kim Mohawk to Blaisdell Fortuna to Yuma Picacho to 2 M. E. of Crag 2 M. W. of Gillespie to Wellton	Maricopa to Estrella Blaisdell to Fortuna 2 M. E. of Crag to 2 M. W. of Gillespie	Kim to Mohawk	McQueen to Christmas	Christmas to McQueen	Tucson to Nogales	Nogales to Tucson
M-4	M-63 20/28 126, 135-S	1617 to 1713	190	2550	2900	1900	4300	2900	2100	3150	3750		
M-6, 8	M-63 21/28 150-S, 159-SF	1721 to 1803, 1823 to 1825	200	3050	3600	2250	5000	3600	2500				
M-9	M-63 21/28 150-S, 162-SF	1804 to 1822, 1826 to 1830, 1836	210	3250	3800	2400	5300	3800	2650	4100	4900		
M-11	M-63 22/28 153-S, 162-SF	1832 to 1835	200	3350	3950	2500	5500	3950	2750	4250	5100		
T-37	T-70 24/26 146-S	2105, 2106	175	3100	3700	2300	5200	3700	2550	3700	4400	2350	3250
P-1, 3, 5	P-77 22/28 141-S	2400 to 2452, 2459, 2460	210	2800	3300	2000	4650	3300	2250				
C-8, 9, 10	C-57 22/30 192-S, 200-SF	2513 to 2599, 2698 to 2860	210	3900	4600	2900	6500	4600	3250	4700	5600	3000	4100
P-12	P-73 26/28 189-SF	3120 to 3129	205	4000	4700	2900	6700	4700	3300				
Mk-2, 4	Mk-57 23½/30 206-S, 230-SF	3201 to 3240	210	4500	5200	3300	7300	5200	3600	5650	6750		
Mk-5, 6	Mk-63 26/28 210-S, 233-SF	3241 to 3277	210	5000	5750	3600	8100	5750	4000	6100	7300		
Mk-7, 8, 9	Mk-63 29/30 247-S, 257-SF	3300 to 3324	176 205	5500	6350	4000	8900	6350	4500				
Mk-7, 8, 9	Mk-63 27/30 247-S, 257-SF												
F-1	F-63 27½/32 273-S, 282-SF	3600 to 3652	200	5700	6700	4200	9300	6700	4700				
F-3	F-63 29½/32 297-S, 300-SF	3653 to 3667	200	6500	7600	4800	10800	7600	5400				
F-4, 5	F-63 29½/32 306/B-61-SF	3668 to 3769	200	6700	8000	5000	11500	8000	5600				
F-4, 5	F-63 29½/32 306/B-62-SF												
AC-7, 8, 10	AC-63 $\frac{24-24}{32}$ 515-SF, 532-SF	4151 to 4244	250	10500	12000	8000	14000	12000	8800				
Mt-1,3,4,5	Mt-73 28/30 246/B-60-SF	4300 to 4376	210	5400	6400	3850	9000	6400	4350				
Mt-2	Mt-73 29/30 262-SF	4385 to 4390	210	5600	6600	4000	9300	6600	4500				
GS-4, 5	GS-80 25½/32 267/B-118-SF	4430 to 4459	300	6000	7000	4300	9700	7000	4800				
SP-1	SP-63 $\frac{25}{28-32}$ 316/B-60-SF	5000 to 5048	225	7600	8800	5600	12500	8800	6800				
SP-2, 3	SP-63 $\frac{25}{28-32}$ 317/B-61-SF												
Allowance for empty and underloaded cars	Less than 45 Ms allow 6 Ms. 45 Ms to 55 Ms allow 3 Ms. More than 55 Ms allow 0 Ms.												

SPEED TABLE

SPEED PER HOUR	1 MILE IN MIN. SEC.	SPEED PER HOUR	1 MILE IN MIN. SEC.	SPEED PER HOUR	1 MILE IN MIN. SEC.	SPEED PER HOUR	1 MILE IN MIN. SEC.
6	10.00	25	2.24	39	1.33	53	1.08
8	7.30	26	2.18	40	1.30	54	1.06
10	6.00	27	2.13	41	1.27	55	1.05
12	5.00	28	2.08	42	1.25	56	1.04
15	4.00	29	2.04	43	1.23	57	1.03
16	3.45	30	2.00	44	1.21	58	1.02
17	3.31	31	1.56	45	1.20	59	1.01
18	3.20	32	1.52	46	1.18	60	1.00
19	3.09	33	1.49	47	1.16	61	.59
20	3.00	34	1.45	48	1.15	62	.58
21	2.51	35	1.42	49	1.13	63	.57
22	2.43	36	1.40	50	1.12	64	.56
23	2.36	37	1.37	51	1.10	65	.55
24	2.30	38	1.34	52	1.09		

DIVISION MILEAGE

Main Lines

Yuma to Lordsburg	S. P. R. R.			412.60	
Tucson to South Yard Junction	E. P. & S. W. R. R.			7.69	
Wellton to Picacho, via Phoenix	A. E. R. R.		195.88		
	S. P. Co.		13.10		
	S. P. R. R.		.03	209.01	
Total Main Lines					629.3

Branches

Benson-Fairbank	S. P. R. R.	At Benson		.64	
Christmas	S. P. Co.	McQueen to Winkelman	74.40		
	A. E. R. R.	Erman to Christmas	12.26		
	K. C. C.	Hayden Jct. to Hayden	.32	86.98	
Creamery	A. E. R. R.	At Tempe	.47		
	S. P. Co.	Tempe to Normal Jct.	1.72	2.19	
Globe	A. E. R. R.	Bowie to Inspiration Jct.		136.14	
Litchfield	A. E. R. R.	Litchfield to Litchfield Park		4.92	
Nogales	S. P. R. R.	Tucson to Nogales		65.79	
Tempe	A. E. R. R.	Tempe Jct. to West Chandler		8.73	
Yuma Valley	Yuma Valley R. R.	Yuma to Somerton		15.00	
Total Branches					320.39
Total					949.69

RATING OF ENGINES—TUCSON DIVISION—Continued

IN Ms OF 1,000 LBS. BACK OF TENDER

				EASTWARD				WESTWARD					EASTWARD					WESTWARD				
Nominal Class	OFFICIAL CLASS	ENGINE NUMBERS	Boiler Pressure	Tucson-Mescal	Benson-Dragoon San Simon Steins	Mescal-Benson Dragoon-Willcox Raso-San Simon Steins-Conrad Pyra-Lordsburg	Willcox-Raso Conrad-Pyra	Lordsburg-Pyra	Pyra-Mondel Steins-San Simon Raso-2 M. E. Cochise Dragoon-Benson Mescal-Tucson	San Simon Bowie	Bowie-Raso 2 M. E. Cochise-Dragoon	Mondel-Steins Benson-Mescal	Bowie-San Carlos	San Carlos Cutter	Cutter-Pinal	Pinal-Globe	Globe-Miami	Miami-Globe	Globe-Pinal	Pinal-San Carlos	San Carlos Tanque	Tanque-Bowie
M-6	M-63 21/28 150-S	1725 to 1769 1780 to 1803 1823 to 1825	200	1950	1500	6000	2900	3250	6000	3650	2250	1500										
M-6	M-63 21/28 159-SF																					
T-37	T-70 24/28 146-S	2105, 2106	175	2000	1550	6000	3000	3350	6000	3750	2300	1550	3700	2250	950	6000	1500	1050	950	6000	3150	2400
C-8	C-57 22/30 192-S	2513 to 2599 2698 to 2860	210	2500	1950	8000	3750	4150	8000	4650	2900	1950	4900	3000	1310	8000	2000	1400	1310	8000	4170	3220
C-9, 10	C-57 22/30 200-SF																					
C-9, 10	C-57 22/30 194-S																					
TW-3	TW-50 20/26 120	2932 to 2945	170	1600	1250	6000	2400	2650	6000	2950	1850	1250	3200	1950	850	7000	1300	900	850	7000	2700	2100
P-12	P-73 26/28 189-SF	3120 to 3129	205	2600	2000	8000	3900	4350	8000	4900	3000	2000	4850	2980	1300	8000	1980	1390	1300	8000	4100	3200
Mk-2, 4	Mk-57 23½/30 206-S	3200 to 3240	210	2800	2200	8000	4250	4750	8000	5300	3250	2200										
Mk-2, 4	Mk-57 23½/30 230-SF																					
Mk-5, 6	Mk-63 26/28 210-S	3241 to 3277	210	3150	2450	8000	4700	5250	8000	5850	3650	2450										
Mk-5, 6	Mk-63 26/28 231-SF.																					
Mk-7, 8, 9	Mk-63 29/30 247-S, 257-SF	3300 to 3324	176 205	3500	2750	8000	5200	5800	8000	6500	4000	2750										
Mk-7, 8, 9	Mk-63 27/30 247-S, 257-SF																					
F-1	F-63 27½/32 273-S	3600 to 3652	200	3700	2900	10000	5500	6100	10000	6850	4250	2900										
F-3	F-63 29½/32 297-S, 300-SF	3653 to 3667	200	4200	3300	10000	6300	7000	10000	7800	4850	3300										
F-4, 5	F-63 29½/32 306/B-61SF	3668 to 3763, 3769	200	4750	3750	10000	7100	7850	10000	8800	5450	3750										
F-5	F-63 29½/32 306/B-62-SF	3764 to 3768																				
AC-7, 8, 10	AC-63 $\frac{24-24}{32}$ 515-SF, 532-SF	4151 to 4244	250	7400	5500	14000	10400	11500	14000	12900	8000	5500										
Mt-1, 3, 4, 5	Mt-73 28/30 246/B-60-SF	4300 to 4376	210	3800	2950	10000	5650	6300	10000	7050	4350	2950										
Mt-2	Mt-73 29/30 262-SF	4385 to 4390	210	3550	2800	10000	5350	5950	10000	6700	4100	2800										
GS-4, 5	GS-80 25½/32 267/B-118-SF	4430 to 4459	300	3900	3000	10000	6000	6700	10000	7500	4550	3000										
SP-1	SP-63 $\frac{25}{28-32}$ 316/B-60-SF	5000 to 5048	225	5350	4350	10000	8000	8850	10000	10000	6150	4350										
SP-2, 3	SP-63 $\frac{25}{28-32}$ 317/B-61-SF																					
	Allowance for empty and underloaded cars	Less than 45 M's allow 6 M's 45 M's to 55 M's allow 3 M's More than 55 M's allow 0 M's																				

ASSISTANT SUPERINTENDENT

G. A. BAYS

TRAINMASTERS

A. G. McMANUS	Yuma
W. C. PRYOR	Phoenix
J. A. McKINNON	Tucson
J. C. SLADE	Bowie

ASSISTANT TRAINMASTERS

J. P. HERLYCK, JR.	Gila
L. E. McCADDON	Gila

ASSISTANT TRAINMASTER-DIVISION EXAMINER

J. J. COWIN	Tucson

CHIEF TRAIN DISPATCHER

H. W. CASSADY	Tucson

ASSISTANT CHIEF TRAIN DISPATCHERS

L. D. BARR	Tucson
A. F. De HART	Tucson

ROAD FOREMEN OF ENGINES

J. H. MENZIES	Tucson
C. A. BALL, Sr.	Tucson

LOCOMOTIVE ENGINEMEN INSTRUCTORS

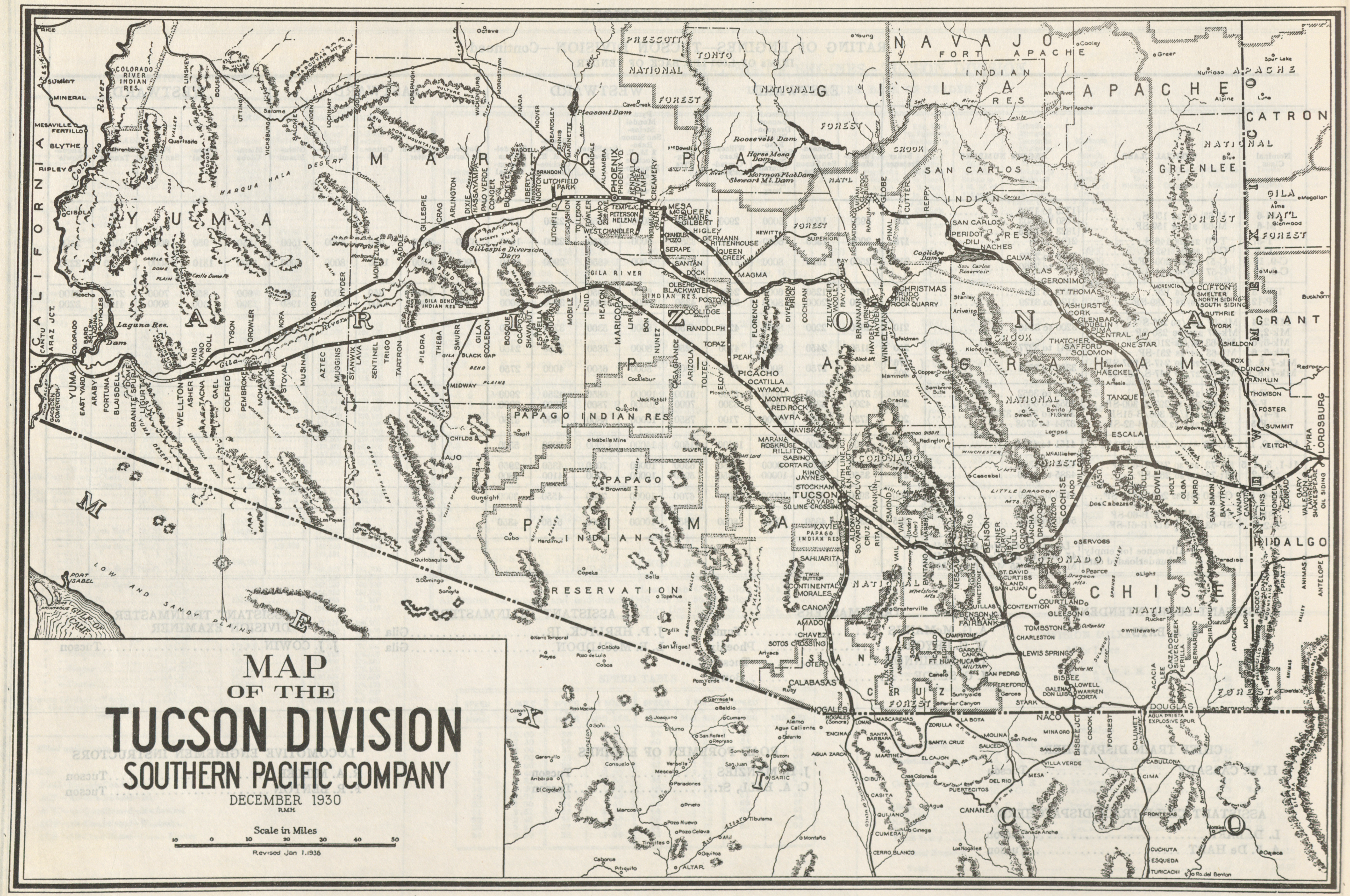
R. A. MILLER	Tucson
F. R. BENTON	Tucson

MAP OF THE TUCSON DIVISION

SOUTHERN PACIFIC COMPANY

DECEMBER 1930

R.M.H.


Scale in Miles
10 0 10 20 30 40 50
Revised Jan 1, 1936
CALIFORNIA
ARIZONA
NEW MEXICO
MEXICO
YUMA
MARICOPA
PINAL
PIMA
GILA
GRAHAM
GREENLEE
COCHISE
SANTA CRUZ
CATRON
GRANT
HIDALGO
NAVAJO
APACHE
COLORADO RIVER INDIAN RES.
FORT APACHE INDIAN RES.
SAN CARLOS INDIAN RES.
GILA RIVER INDIAN RES.
GILA BEND INDIAN RES.
PAPAGO INDIAN RES.
PAPAGO INDIAN RESERVATION
PRESCOTT NATIONAL FOREST
TONTO NATIONAL FOREST
CROOK NATIONAL FOREST
CORONADO NATIONAL FOREST
APACHE NATIONAL FOREST
GILA NAT'L FOREST
HARQUA HALA DESERT
GILA BEND PLAINS
LOW AND SANDY PLAINS
TULE DESERT
GULF OF CALIF.
PORT ISABEL
Colorado River
Gila River
Roosevelt Dam
Horse Mesa Dam
Mormon Flat Dam
Stewart Mt. Dam
Coolidge Dam
San Carlos Reservoir
Pleasant Dam
Gillespie Diversion Dam
Laguna Res.
PHOENIX
TUCSON
YUMA
NOGALES
DOUGLAS
BISBEE
LORDSBURG
WELLTON
GILA BEND
MARICOPA
CASA GRANDE
PICACHO
RED ROCK
MARANA
BENSON
TOMBSTONE
FAIRBANK
NACO
GLOBE
WINKELMAN
HAYDEN
RAY
FLORENCE
COOLIDGE
CHANDLER
MESA
TEMPE
GLENDALE
BUCKEYE
WICKENBURG
SALOME
PARKER
CLIFTON
SAFFORD
BOWIE
COCHISE
WILLCOX
AJO
CANANEA
NOGALES (Sonora)
AGUA PRIETA